



PHASE I ARCHITECTURAL HISTORY EVALUATION AND AREA OF POTENTIAL EFFECT SCOPING FOR THE HIGH BRIDGE COMBINED CYCLE PROJECT, 501 SHEPARD ROAD, ST. PAUL, RAMSEY COUNTY, MINNESOTA

Submitted to:
Barr Engineering

Submitted by:
The 106 Group Ltd.

December 2004

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AND AREA OF POTENTIAL EFFECT SCOPING FOR THE
HIGH BRIDGE COMBINED CYCLE PROJECT,
501 SHEPARD ROAD, ST. PAUL,
RAMSEY COUNTY, MINNESOTA**

**SHPO File No. Pending
The 106 Group Project No. 04-33**

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December 2004

MANAGEMENT SUMMARY

During December of 2004, The 106 Group Ltd. (The 106 Group) conducted a Phase I architectural history evaluation and Area of Potential Effect (APE) scoping for the Northern States Power Company, doing business as Xcel Energy (Xcel Energy), High Bridge Combined Cycle Project at 501 Shepard Road, St. Paul, Ramsey County, Minnesota. The proposed project (the project) consists of the replacement of the existing coal-fired High Bridge Power Plant with a natural gas-fired combined cycle system. The new plant, to be constructed on the current High Bridge Power Plant property, will be placed in service in the spring of 2008. Once the new plant is completed, the existing plant will be decommissioned and demolished. The survey was conducted under contract with Barr Engineering on behalf of Xcel Energy. The results of this study will be incorporated into the Site Permit application to be submitted to the Minnesota Environmental Quality Board. The purpose of the architectural history investigation was to evaluate the potential eligibility of the High Bridge Power Plant for the National Register of Historic Places (NRHP), to define the visual effects APE, and to identify previously inventoried properties from the State Historic Preservation Office (SHPO) database.

The project area is located in Sections 1 and 12, T28N, R23W, St. Paul, Ramsey County, Minnesota. The APE includes all properties with potential visual effects, as well as physical, and auditory impacts. The Phase I architectural history investigation consisted of a review of documents of previously inventoried properties and surveys previously conducted within the project area, as well as the documentation and evaluation of the property being directly affected by the proposed project (the High Bridge Power Plant). The APE scoping study established a proposed visual effects APE for use in determining whether the project would have an effect on historic properties. Betsy H. Bradley, Ph.D. served as Principal Investigator.

The 106 Group evaluated the High Bridge Power Plant (RA-SPC-3322) at 501 Shepard Road, St. Paul for its potential eligibility for listing on the NRHP. The 106 Group recommends that the property is not eligible for listing on the NRHP due to lack of significance. The 106 Group identified 793 previously inventoried properties within the recommended APE. 118 properties are listed on the NRHP; an additional 77 properties are considered eligible for listing on the NRHP.

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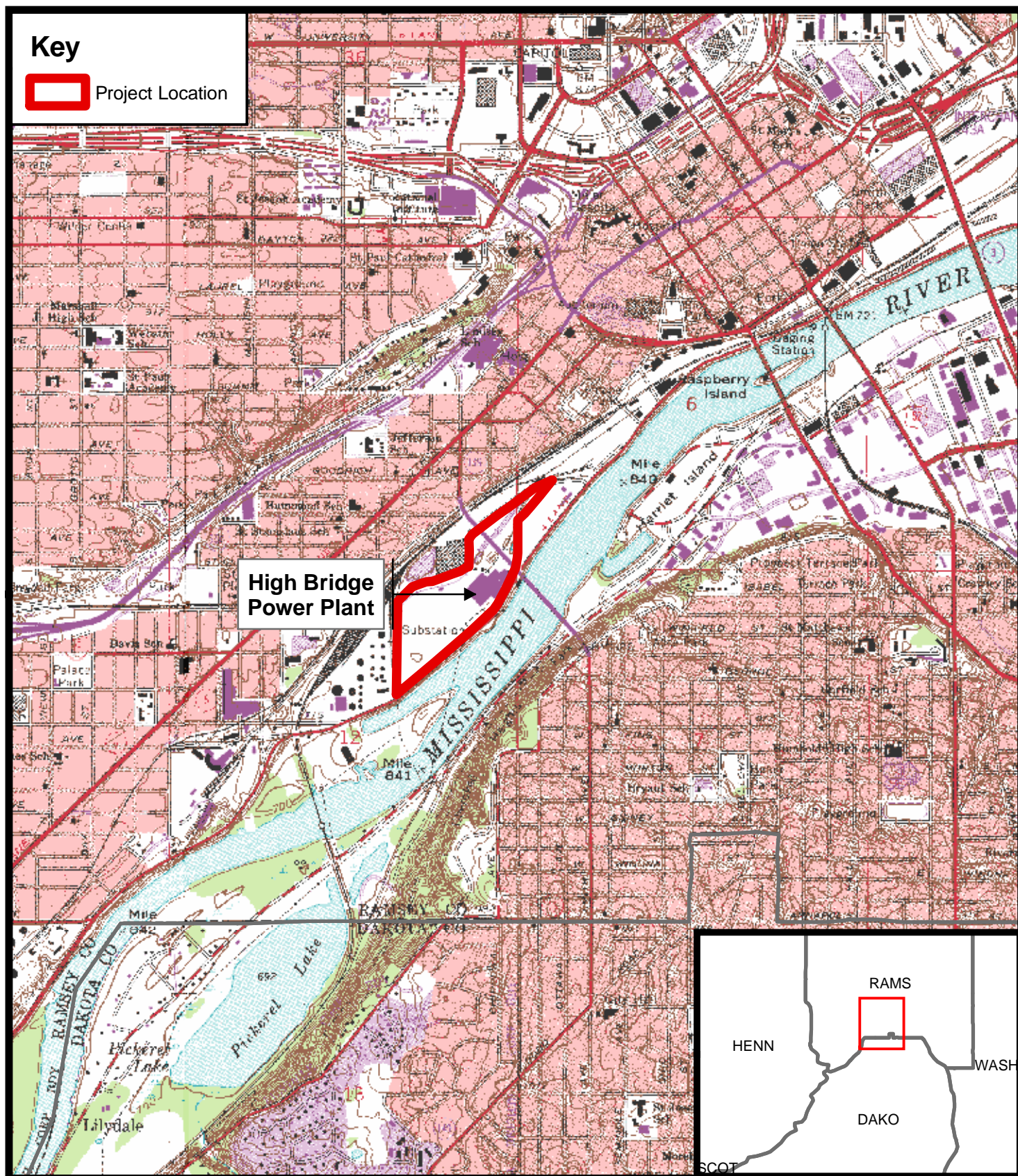
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1.0 INTRODUCTION

During December of 2004, The 106 Group Ltd. (The 106 Group) conducted a Phase I architectural history evaluation and Area of Potential Effect (APE) scoping for the Northern States Power Company, doing business as Xcel Energy (Xcel Energy), High Bridge Combined Cycle Project at 501 Shepard Road, St. Paul, Ramsey County, Minnesota. The proposed project (the project) consists of the replacement of the existing coal-fired High Bridge Power Plant with a natural gas-fired combined cycle system. The new plant, to be constructed on the current High Bridge Power Plant property, will be placed in service in the spring of 2008. Once the new plant is completed, the existing plant will be decommissioned and demolished. The survey was conducted under contract with Barr Engineering on behalf of Xcel Energy. The results of this study will be incorporated into the Site Permit application to be submitted to the Minnesota Environmental Quality Board. The purpose of the architectural history investigation was to evaluate the potential eligibility of the High Bridge Power Plant for the National Register of Historic Places (NRHP), to define the visual effects APE, and to identify previously inventoried properties from the State Historic Preservation Office (SHPO) database.

The Phase I architectural history investigation began with a review of documents of previously inventoried properties and of surveys previously conducted within the project area, and other research focused on the High Bridge Power Plant. The property was field surveyed and documented with digital photographs, and then evaluated for eligibility for listing on the NRHP. The APE Scoping was initiated with field work to establish a proposed visual effects APE. The APE was set to include all properties with potential visual effects and also encompasses all properties with potential physical and auditory impacts. (Figure 2). This portion of the investigation also considered the general effects of the project and included a search of architectural history inventory records at the SHPO within the APE in order to document properties that are inventoried in the SHPO database.

The architectural history survey area was limited to the High Bridge Power Plant property, 501 Shepard Road, which includes approximately 76 acres (30.76 hectares). The UTM coordinates for the site are Zone 15, 491496E and 4975557N (NAD 83).



**High Bridge Combined Cycle Project
Phase I Architectural History Investigation
and Area of Potential Effect Scoping
St. Paul, Ramsey County, Minnesota**

0 0.25 0.5 0.75 1 Miles

1:24,000

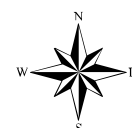
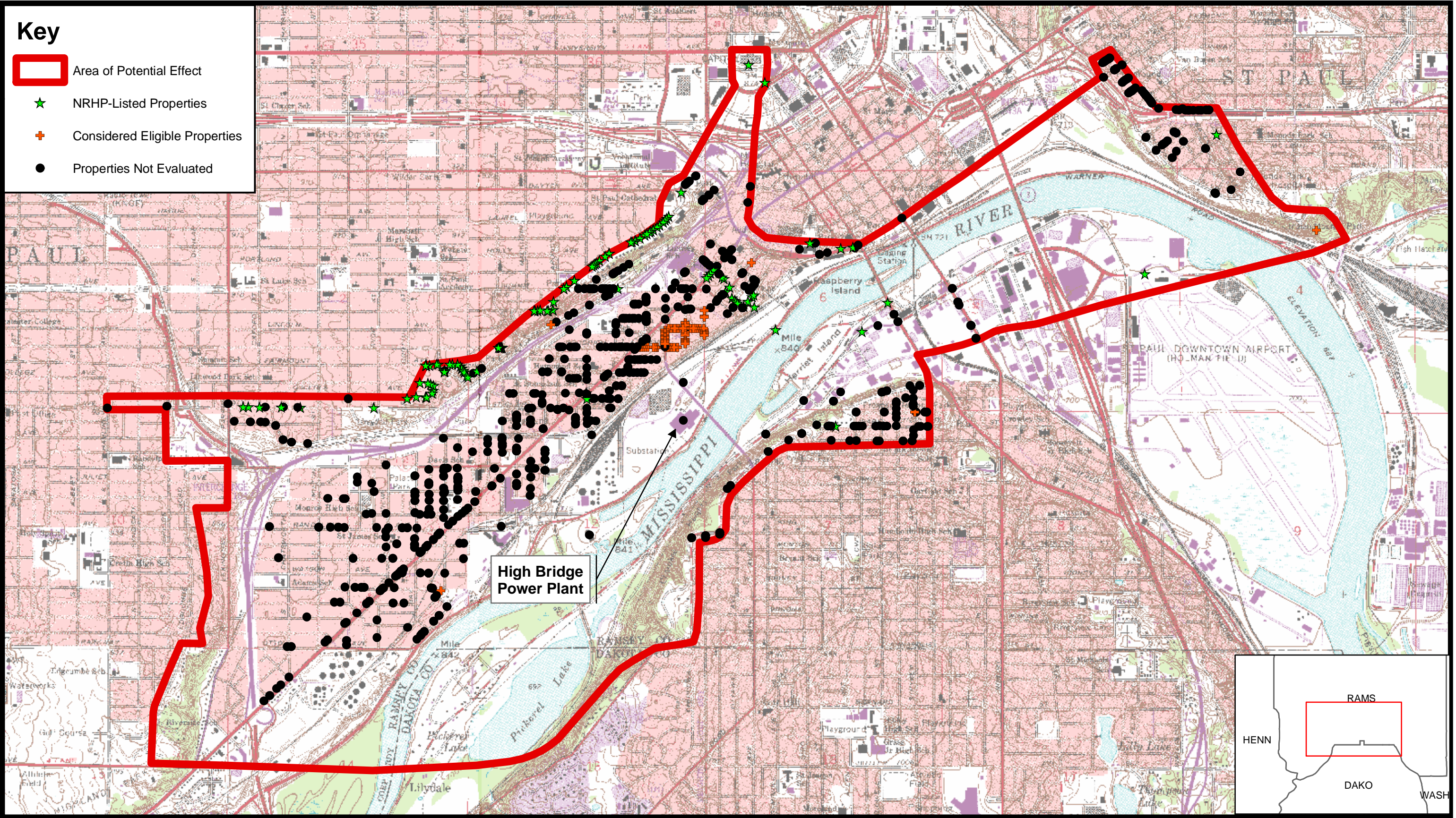


Figure 1

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The following report describes project methodology; includes the results of the database search for previously inventoried properties and the NRHP evaluation of the High Bridge Power Plant; presents a recommended visual effects APE and observations regarding the effect of the project on properties within the APE; and offers recommendations for the High Bridge Combined Cycle Project with regards to Section 106 compliance. Appendix A provides a list of previously inventoried properties within the proposed visual effects APE. Appendix B consists of a copy of the SHPO Architecture-History Inventory Form prepared for the High Bridge Power Plant. Appendix C provides a list of project personnel.

1.1 DESCRIPTION OF UNDERTAKING

The proposed undertaking would entail the replacement of the existing coal-fired High Bridge Power Plant located in St. Paul on the Mississippi River with a natural gas-fired 2-on-1 combined cycle system, consisting of two combustion turbines, corresponding heat recovery steam generators, and a new steam turbine generator. The plant will be supplied with natural gas by a new pipeline connection to the existing Northern Natural Gas interstate pipeline located south of the project. The new plant, to be constructed on the current High Bridge Power Plant site, will be placed in service in the spring of 2008. The new building will be approximately 425 feet long by 350 feet wide and will stand 120 feet tall. Two steel stacks, which will rise to a height between 150 to 200 feet, will be located outside the plant. Water treatment and electrical buildings will be attached to the main power generation building. The visible components of the project will include the power generation building, two exhaust stacks, and large outdoor equipment (Xcel Energy 2004a).

The existing High Bridge Power Plant was completed in 1924 and expanded in capacity during the 1940s and again in the 1950s. Once the new plant is completed, the existing plant will be decommissioned and demolished and site abatement will be completed. In addition to the building and concrete stack, the coal storage yard adjacent to the plant will be eliminated.

2.0 METHODS

2.1 OBJECTIVES

The primary objectives of the architectural history investigation were to determine whether the High Bridge Power Plant property is potentially eligible for listing on the NRHP. The investigation included the establishment of a visual effects APE and identification of previously inventoried properties within that APE that could be affected by the project. All work was conducted in accordance with *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* [48 Federal Register 44716-44740] (National Park Service [NPS] 1983).

2.2 AREA OF POTENTIAL EFFECT (APE)

A windshield survey was undertaken in order to establish an APE that accounts for any physical, auditory, or visual impacts to historic properties. The High Bridge Power Plant is located on the Mississippi River flats in St. Paul, approximately one mile southwest of the city's downtown riverfront. Its setting, within a densely built-up urban area and along a river way bound by high bluffs, has the potential for a large visual APE containing many historic properties. The visibility of the 570-foot smoke stack was used to set the APE. Other effects, such as traffic circulation and auditory effects, are believed to be included within the visual effects APE.

2.3 BACKGROUND RESEARCH

On December 8, 2004, staff from The 106 Group conducted background research at the SHPO for information on previously inventoried properties located within the proposed visual effects APE.

2.4 OTHER RESEARCH

Other research included a review of secondary sources available at the Minnesota Historical Society (MHS) to establish the historical context for the project site. The *Annual Reports* of Northern States Power Company (NSP) and other documents published by and about the power company at MHS were used. Senior Production Engineer Kenneth H. Nordstrom provided a tour of the power plant and information about its history and operation.

2.5 FIELD METHODS

A field survey was undertaken on December 10, 2004 to document the High Bridge Power Plant at 501 Shepard Road with field notes and digital photographs. Additional fieldwork was undertaken to establish a proposed visual effects APE. This work included

field testing from ground level the visibility of the existing plant and the proposed project from various locations within the APE.

2.6 INVENTORY FORMS

An updated Minnesota Architecture-History Inventory Form was completed for the High Bridge Power Plant property at 501 Shepard Road.

2.7 EVALUATION

Upon completion of the fieldwork, the potential eligibility of the High Bridge Power Plant for listing on the NRHP was assessed based on the property's potential significance and integrity. The NRHP criteria, summarized below, were used to help assess the significance of the property:

- Criterion A – association with the events that have made a significant contribution to the broad patterns of our history;
- Criterion B – association with the lives of persons significant in our past;
- Criterion C – embodiment of the distinctive characteristics of a type, period, or method of construction; representation of the work of a master; possession of high artistic values; or representation of a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D – potential to yield information important to prehistory or history (NPS 1995).

The NPS has identified seven aspects of integrity to be considered when evaluating the ability of a property to convey its significance: location, design, setting, materials, workmanship, feeling, and association. The integrity of each property or site was assessed in regard to these seven aspects. The properties were also assessed to determine if they represent a type of property to be excluded from the NRHP because of Criteria Considerations (NPS 1995).

2.8 ANALYSIS OF VISUAL EFFECTS

For historic properties within the visual APE, several factors were taken into consideration to determine if the effects of the project would adversely affect the historical characteristics of the each property. Factors such as topography, vegetation, and existing land use contributed to the determination of the APE. Generally, an undertaking will have an adverse visual effect on a historic property if the visual effect from the facility will noticeably diminish the integrity of one or more of the characteristics qualifying the property for inclusion in or eligibility for the NRHP. New construction generally would not be an adverse visual effect, except where the visual setting or visual elements are character-defining features of eligibility of a historic property.

3.0 PREVIOUSLY INVENTORIED HISTORIC PROPERTIES

The visual effects APE includes 793 inventoried properties. 118 properties are listed on the NRHP, many as contributing resources in historic districts; an additional 77 properties are considered eligible for listing on the NRHP. These include properties near the bluff within the large Historic Hill District. The Alexander Ramsey House and the Irvine Park Historic District are among the properties within the APE. Several properties in the West Seventh Street residential neighborhood are considered eligible for listing on the NRHP. The Minnesota State Capitol and the Minnesota Historical Society, both listed on the NRHP, and much of the Capitol Mall Historic District, which has been determined eligible for listing on the NRHP, are within the APE. The properties in the APE that are individually listed include the St. Paul Cathedral, the St. Paul Library/James J. Hill Reference Library, the St. Paul City Hall and Ramsey County Courthouse, the Harriet Island Pavilion, and the James J. Hill House, a National Historic Landmark.

Appendix A and Figure 2 present the previously inventoried properties within the visual effects APE.

4.0 EVALUATION OF ELIGIBILITY

Staff from The 106 Group conducted a Phase I architectural history investigation to determine the potential eligibility of the High Bridge Power Plant located at 501 Shepard Road, St. Paul. The proposed project will have a direct effect on this property.

4.1 THE HIGH BRIDGE POWER PLANT (RA-SPC-3322)

**501 Shepard Road
St. Paul, Ramsey County, Minnesota**

4.1.1 Historical Context: Electric Power for the St. Paul and the Twin Cities Metro Area

The Regional Operation. Small, independent companies developed the electric power utility industry during the last decades of the nineteenth century. The construction of transmission lines, a development that initially enabled these firms to serve communities remote from generating stations, soon facilitated the consolidation of the industry into larger firms. Electric companies realized economies of scale as small operations combined and served their customers with more efficient generating stations equipped with the latest equipment. The many advances made in technology—the introduction of the steam turbine, high voltage transmission, and large, efficient alternating current motors—between 1900 and 1910 made it difficult for small companies to keep their facilities up-to-date with new equipment and to upgrade their service (Meyer 1957a:148).

This consolidation trend in the industry was well under way by 1910 and ten years later most of the large public utility systems had been organized. Often these systems were under the control of one of the several large utility holding companies. These firms provided the financing for expansion and improvements and controlled groups of smaller companies until they were abolished by law in 1935. Electric power utility boosters were certain that the larger systems provided communities with better service, lower rates, and financial stability (Meyer 1957a:148).

The H. M. Byllesby & Company (Byllesby & Co.) and the Northern States Power Company (NSP) has a history that mirrored these national trends. Henry M. Byllesby, an engineer with a long career in the electric industry, and his partners established Byllesby & Co. in 1902. Its purpose was to purchase small struggling utility companies and transform them into well-run operations. Byllesby & Co.'s first acquisitions were in Illinois, Ohio, and Oklahoma. The company eventually turned its attention to Minnesota where one of the partners, Arthur S. Huey, had been in the electric equipment business in Minneapolis. Byllesby & Co.'s first project in the Twin Cities region was the merger of the Washington County Light and Power Co. and the Stillwater Gas and Electric Co. into the Consumers Power Co. (Consumers Power) in 1909. NSP was organized in Delaware as a holding company and source of financing for its subsidiary, Consumers Power, later

in 1909. Consumers Power expanded immediately and its holdings soon extended south to Faribault and Mankato, Minnesota and Galena, Illinois and northwest to the Fargo, North Dakota area. Consumers Power acquired the Minneapolis General Electric Co. in 1912 and three years later moved its general office from Chicago to Minneapolis. During the 1910s the company completed several transmission lines that connected the communities it served. Consumers Power increased its generating capacity in 1913 by adding two units to the Riverside plant in Minneapolis and installing a 4,000-kilowatt steam turbine at its Third Street Station in St. Paul (Meyer 1957a:149).

The power company was reorganized in 1916. The changes included the adoption of the name Northern States Power Co. (Minnesota) and a financial restructuring through the issuance of new securities. NSP remained a subsidiary of Byllesby & Co. The power company again increased its generating capacity, two-thirds of which was steam generated and one-third of which was hydropower. During the early 1920s, the company expanded again and its acquisitions included several small operations in the Twin Cities area. NSP continued to construct transmission lines and to expand the Riverside Station plant. The High Bridge Power Plant and the Terminal, Aldrich, and Wilson Substations in the Twin Cities were the company's major new construction projects during this period. NSP purchased an important competitor, the St. Paul Gas Light Company, in 1925 and continued to acquire more of the small power companies in Minnesota (Meyer 1957a:150).

The steady growth of NSP slowed during the 1930s. The next expansion occurred when the industrial activity that developed in support of World War II during the last years of that decade required additional capacity. The High Bridge Plant was enlarged during the early 1940s to meet this need. NSP adopted a five-year construction program in 1947 in response to the large increase in electric power use after World War II. Many of the company's plants were expanded, including the Riverside and High Bridge plants, and the Black Dog Plant on the Minnesota River in Burnsville was added to the system. These three plants—High Bridge, Riverside and Black Dog—were NSP's "base-load" plants. Additional substations and transmission lines were erected in the Twin Cities area. The interest in atomic energy was sufficient to be addressed in the company's 1954 annual report; two years later NSP announced plans for the construction its first nuclear power plant (Meyer 1957a:151; *NSP Annual Reports* 1947:22-23; 1954; 1956:21).

Electric Power for St. Paul. The public utility industry in St. Paul that provided light and heat began with gas companies during the 1850s. A charter was granted to the incorporators of the St. Paul Gas Light Company in 1856. This company expanded its operation to include the generation of electricity in 1882. It acquired a Fuller Electric Co. generator and provided electricity to a handful of business firms in downtown St. Paul. The St. Paul Gas Light Co. erected an electric power plant on Hill Street in 1885. The company concentrated on its gas service through the 1890s, but in 1894 it purchased the Edison Electric Light and Power Co. of St. Paul plant at College and Cedar Streets, which had been in operation since 1886. The availability of electric power from the St. Croix Power Co.'s Apple River Falls hydroelectric plant after 1899 enabled the St. Paul Gas

Light Co. to expand its electric service. Although some large buildings in St. Paul had combination steam heat and electric plants and provided electricity to the immediate area, the St. Paul Gas Light Co. had no significant competition. This domination of the electric power utility in St. Paul ended when Consumers Power purchased the Northern Heating and Electric Co., which had built a small power station on Third Street (Meyer 1957b:8; Phelps 1984:8.1-8.2).

Both the St. Paul Gas Light Co. and NSP provided electric power to St. Paul during the 1910s and 1920s. The St. Croix Falls plant, which provided nearly half of the available power in 1912, and the Coon Rapids hydroelectric plant, added to NSP system during the 1910s, took advantage of the region's waterpower potential. NSP increased the capacity of the Riverside Plant in Minneapolis in 1914, 1917, and 1921 and continued to utilize its small Third Street Steam Plant in St. Paul and the Main Street Station in Minneapolis. By the early 1920s, the demand for NSP electric power reached the point where it exceeded the minimum hydroelectric capacity and that available from the Riverside Plant. This use of power in St. Paul was taxing the lines available to carry in from the power sources and NSP urgently needed a new plant in or close to the city (High Bridge Steam Plant 1924:1006; *StPD* 1922; Xcel Energy 2004b).

The High Bridge Plant in St. Paul was designed to significantly increase the total capacity of NSP's service in the Twin Cities area. The plant was part of a 10-year development program that would triple the amount of power available to the Twin Cities. The first steps were the construction of the High Bridge Plant and a transmission line that would loop around and connect St. Paul and Minneapolis. The various plants, connected by this transmission line, served as reserve supplies for each other and in that way reduced the need for duplication of equipment and insured continuity of service. The plan included improvements to the hydro-plants on the St. Croix River and expansion of the Riverside and High Bridge Plants, as needed (High Bridge Steam Plant 1924:1006; *NSP Annual Report* 1923; *StPD* 1922).

Another electric power generating plant was constructed at nearly the same time as the High Bridge project. The St. Paul Gas Light Co. purchased electric power from NSP during the early 1920s but NSP set a limit on the amount of power it supplied to its competitor. The St. Paul Gas Light Co. decided to construct its own power plant and initiated its Island Station Plant project on a site not far from the High Bridge Plant on the Mississippi River. About a year after the Island Station plant was completed, NSP purchased the St. Paul Gas Light Company. At that time, the St. Paul Gas Light Company provided approximately 70 percent of the electric light and power service in St. Paul. NSP used Island Station only as a subsidiary source of power (Phelps 1984:8.3-8.4).

4.1.2 Description

The NSP High Bridge Plant is located on the banks of the Mississippi River between Shepard Road and old Shepard Road along the river (Figure 3). The plant was positioned near the center of a parcel that was originally 50 acres and later enlarged to slightly more than 76 acres. A Chicago, St. Paul, Minneapolis & Omaha Railway spur line enters the property and branches into several sidings, some of which remain (Figure 4).



FIGURE 3. HIGH BRIDGE PLANT, FACING NW

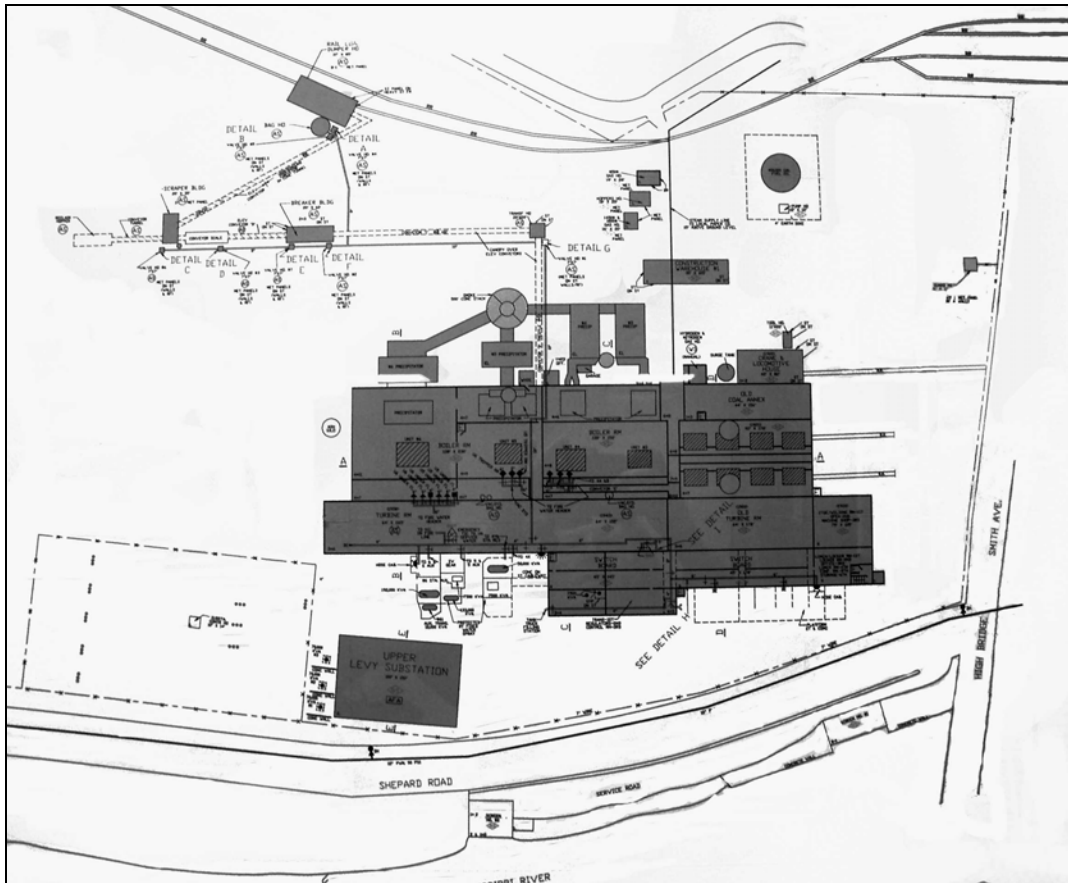


FIGURE 4. HIGH BRIDGE PLANT SITE

The power plant consists of several sections that correspond to its interior functional divisions and phases of construction (Figure 5). The long brick façade along the river side of the plant, built as part of the first construction project, visually unifies the portions of the plant built in 1924 and the early 1940s. All of the sections of the steel-framed building built prior to the 1950s are enclosed with red brick curtain walls. The southwest wing of the plant built in the 1950s is enclosed with ribbed sheet metal and has a fenestration pattern different from that of the earlier portions of the plant (Figure 6). The power plant floors are concrete; steel trusses support its roof.



FIGURE 5. HIGH BRIDGE PLANT, FACING SW



FIGURE 6. 1950S PORTION OF THE PLANT, FACING SW

The walls of the 1924 portion of the plant have a rusticated two-story base section (see Figure 5). The upper walls are divided into bays by pilasters that terminate with stone caps below the parapet. The brick walls of the 1941-1943 portion of the plant do not have pilasters or the stone detailing used on the original portion of the plant. The bays are filled with tall windows that span several floor levels of the turbine and boiler rooms of the 1924 section. Windows in the office and substation portions of the plant and in the 1940s portion of the boiler room do not span several floor levels. Original industrial steel sash with operable awning units remains in place in some of the windows. Openings in

the areas used as offices, machine shop, and some of the boiler room windows have replacement aluminum-framed sash. A stone band course sets off the parapet, which have decorative brick panels and edge the plant's flat roofs; the low-pitched pediment forms that were centered on each parapet section have been removed. Roof monitors with wire-glass side walls light some of the interior spaces.

The coal that fueled the boilers in the 1924 portion of the plant was brought into the facility on a pair of spurs that entered the northeast end of the coal unloading building, which was adjacent to the boiler room. This tall, one-story space has two vehicular doors in its northeast end wall, now filled with modern doors (Figure 7). A tall parapet edges the roof from which a gable-roofed monitor rises. A vertical conveyor shaft, which rose along the southwest end of the exterior wall and connected with a horizontal conveyor gallery that extended across the boiler room portion of the plant, has been cut off at the height of the parapet. Most of the windows in the northwest wall of this wing were blocked when a locomotive crane shed was added to the plant circa 1926. This lower one-story space has the rusticated brick walls and parapet detailing of the coal unloading building; it also has two vehicular doors in its northeast end wall.



FIGURE 7. LOCOMOTIVE CRANE SHED, COAL UNLOADING BUILDING, BOILER ROOM, AND OTHER PORTIONS OF THE PLANT, FACING S.

The 1940s portion of the boiler room has a taller section adjacent to the 1924 boiler room and extends to the northwest the width of the coal unloading building. The 1940s sheet-metal chimney positioned adjacent to the boiler room has been truncated and is surrounded by the steel framework that supports the precipitators that served the units in that section of the plant. Exterior enclosed coal conveyors fed the large internal coal bunkers that are located within the boiler room.

The turbine room is located adjacent to the boiler rooms. This portion of the plant, though not expressed clearly on the exterior of the plant, is a distinctive interior space (Figures 8 and 9). The narrow, rectangular space was extended with no dividing walls as the plant was enlarged in the 1940s and 1950s. The turbine room, approximately 585 feet in length, houses six generators placed end-to-end. The original 100-ton traveling crane, supported on crane girders mounted on the wall, serves the entire space, as well as the machine shop at the northeast end of the space. The 1924 and 1940s portions of the turbine room have yellow brick walls detailed with green brick. A roof monitor lights the 1924 portion of the space.



**FIGURE 8. TURBINE ROOM, FACING NE INTO THE 1924 END
AND THE MACHINE SHOP BEYOND.**



FIGURE 9. TURBINE ROOM, FACING SW INTO THE 1950S END OF THE SPACE.

A narrow wing of the plant forms the riverfront façade (Figure 10). This wing houses several floors of control rooms containing offices, switchboards, and an indoor substation. The wing projected from the 1924 main block of the power plant to the southwest, in anticipation of expansion of the generating capacity of the plant. The riverside façade of these wings includes two portions with a regular fenestration pattern, and a central windowless section. A brick wall with a decorative design on its old Shepard Road side has been recently added to the property.



FIGURE 10. HIGH BRIDGE PLANT RIVER FAÇADE (1924), FACING N

The major coal storage area was moved to the southwest side of the plant by the 1950s (Figure 11). The coal crusher unit and conveyors in that area date from the 1950s; the coal loading building was added to the coal handling system during the 1970s (Figure 12). A manufactured building, used as a warehouse, stands in the yard northwest of the original portion of the plant (Figure 13). The nearly 570-foot tall concrete chimney that stands northwest of the 1950s boiler room section was erected in 1972 (Figure 14). A steam line that delivers steam to an off-site customer extends from the plant northwest across the property (see Figure 14).



FIGURE 11. COAL STORAGE YARD, FACING W



**FIGURE 12. COAL CRUSHING AND LOADING FACILITIES,
FACING SW**



FIGURE 13. WAREHOUSE BUILDING, FACING N



**FIGURE 14. CONCRETE SMOKE STACK AND ASSOCIATED
PRECIPITATORS, FACING SW**

A concrete retaining wall that flanked the No. 1 Screen House water intake area, as well as intake structure remains on the riverfront. The No. 1 Screen House has been demolished (Figure 15). The No. 2 Screen is positioned on the riverbank opposite the 1950s portion of the plant (Figure 16). The Upper Levee Substation, which consists of a concrete block building and transformer yard, is located between the 1950s portion of the plant and old Shepard Road (Figure 17).



FIGURE 15. NO. 1 SCREEN HOUSE AREA, WATER INTAKE STRUCTURE AND BOOM, FACING SW



FIGURE 16. NO. 2 SCREEN HOUSE, FACING S

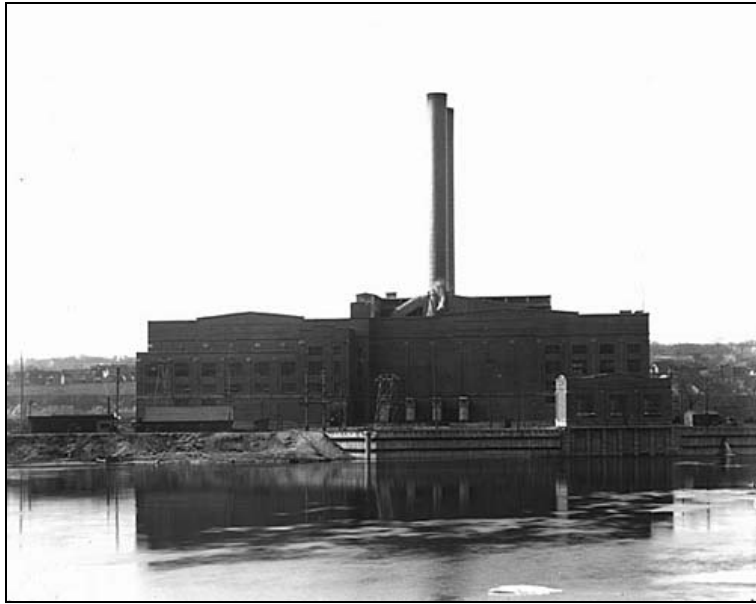


FIGURE 17. UPPER LEVEE SUBSTATION, FACING W

4.1.3 History

The construction of the High Bridge Plant, which was to relieve the demands on the NSP Riverside Plant in Minneapolis, was announced in December 1922. NSP selected a 50-acre site on the Mississippi River, then occupied by a substation, for the plant and took its name from the High Bridge over the Mississippi River that crossed the property. The location provided a supply of river water for the condensers and good railway connections for the delivery of coal. The demands for coal and water were staggering: the first generator required one ton of coal each hour for the generation of steam and 750 tons of water were necessary for every ton of coal consumed (*StPD* 1922; High Bridge Steam Plant 1924:1006).

The Byllesby Engineering & Management Corporation, a subsidiary of Byllesby & Company, designed the plant and oversaw its construction. H. W. Fuller was vice-president and chief engineer; F. H. Land was the manager of engineering and construction. The plant was designed to be expanded to accommodate eight generating units and to be the big base-load plant of the NSP system. The plan for expansion resulted in the extension of the river side wing beyond the main block of the plant (Figure 18). The next section of the plant would include an extension of the turbine and boiler rooms behind that wing (High Bridge—A Power Giant for the Central Northwest; *StPD* 1922; High Bridge Steam Plant 1924:1012).



Source: Minnesota Historical Society. Location No. I.135.68

FIGURE 18. 1925 VIEW OF THE HIGH BRIDGE PLANT

Simplicity, economy, and convenience, rather than the use of the newest and most expensive equipment, guided planning for the plant. Its design drew upon standard plans for spaces and equipment arrangements adopted by Byllesby & Co. The engineers decided to use mechanical stokers instead of the newer pulverized coal system to feed the boilers. The riverbank location of the plant and fluctuating water levels limited the amount of excavation undertaken and required the use of concrete piles; only the area under the turbine room, where the water intake and discharge tunnels met the condenser cooling apparatus, was below grade (High Bridge Steam Plant 1924:1006-1008).

The High Bridge plant started producing electricity on June 15, 1924. As was usual at the time, St. Paul Mayor A. E. Nelson officially started the turbine in a public ceremony held the following month. After the second generator, Unit 2, went on line in October, 1924, the High Bridge Plant was celebrated by its parent holding company as a “Power Giant” for the central northwest. In 1925 the plant required 900 tons of coal and 368,000 tons of water each day. The plant property provided storage space for 170,000 tons of coal, the equivalent to nearly 200 days of operation, in a coal and pole storage yard initially located north of the plant. The High Bridge and Riverside facilities, NSP’s base-load plants, were connected by a new “power loop” that circled the Twin Cities and linked them with the rest of the system. The High Bridge Plant could also distribute power directly to St. Paul (New High Bridge Power Plant at St. Paul Placed in Operation; High Bridge—A Power Giant for the Central Northwest; NSP 1996; Xcel Energy 2004c).

A large sign with 12-foot tall letters that spelled “Northern States Power Company” and a shield was installed on the twin smokestacks of the High Bridge Plant in 1929. This sign, one of the largest electric signs in St. Paul and visible for miles, was removed circa 1960 (High Bridge Plant has Largest Electric Sign in St. Paul).

NSP announced plans in 1940 to add a 50,000-kilowatt generator to the High Bridge Plant. This increase in generative capacity was accompanied by an addition to the plant, a wing placed behind the river-facing extension of the original plant (Figure 19). The No. 3 steam unit, placed in service in February 1942, could use both coal and natural gas as a fuel. This unit signaled a change from stoker-fed boilers to the use of pulverized coal. An additional generator of the same size, Unit 4, was ordered in 1941 and went on line in March 1944. The War Production Board approved these wartime generator acquisitions. In 1942 and 1943 heavy transmission lines between the main generating station in St. Paul and Minneapolis were completed (NSP *Annual Reports* 1940:9; 1941:12; 1942:10; 1943:10; NSP 1996; Kenneth H. Nordstrom, personal communication December 9, 2004).



Source: Minnesota Historical Society. Location No. Norton & Peel 138624

FIGURE 19. 1941 VIEW OF THE HIGH BRIDGE PLANT

The High Bridge Plant was enlarged in the next round of construction in the post-World War II expansion program. Units 5 and 6 of the High Bridge Plant went on line in 1956 and 1959 in a new wing of the plant (Figure 20). By that time, the scale of each addition was significantly larger than the original ones; they were rated at 100,000 and 156,000 kilowatts. The High Bridge Plant was NSP's largest power plant in 1961. With a 482,800-kilowatt capacity, it exceeded that of the decade-old Black Dog Plant by only about 22,000 kilowatts. By 1984, NSP was using the High Bridge Plant as an auxiliary plant to supplement the power generated by its newer and more efficient plants (NSP *Annual Reports* 1947:22-23; 1956:14; 1961:10; NSP 1984:2; NSP 1996).



Source: Minnesota Historical Society. Location No. MR2.9 SP1m p87

FIGURE 20. 1978 VIEW OF THE HIGH BRIDGE PLANT

During the 1970s, the emissions control program of the plant was updated with the installation of outside precipitators. After the new smoke stack was erected in 1972, the smaller stacks that served the individual units were removed. The original generators, Units 1 and 2, and their associated smoke stacks were removed in 1976. Units 3 and 4 were taken out of service during the 1980s, but remain in the plant (NSP 1996; Kenneth H. Nordstrom, personal communication December 9, 2004).

4.1.4 Significance

The High Bridge Power Plant has long been an important functional component of the NSP (now Xcel Energy) power supply system. The plant was designed to become one of the company's important base-load plants. Additions made to the 1924 plant during the 1940s and 1950s maintained that role and during the last half of the twentieth century, the High Bridge Power Plant functioned as one of three base-load plants in the Twin Cities area.

Functional importance and historic significance are related, but are slightly different concepts. Virtually all public utility facilities have functional importance. However, only some hydroelectric and steam power generating plants have been landmark events in the electric power industry. An example of such a property would be the first Niagara Falls plant completed in 1881, which confirmed the success of hydropower plants. Hoover Dam, completed in 1935, is considered to be an engineering masterpiece and a project that transformed the southwest region of the United States. The historic significance of Hoover Dam is recognized in its National Historic Landmark designation.

Many of the additional hydropower plants and steam power plants erected in the United States have had local functional importance and the power they provided contributed to the urbanization and industrialization of specific locations. The relative importance of power plants and historically significant local developments in utilities are best studied in a state-wide or regional context. For instance, groups of hydropower plants in the states of Washington and Utah have been listed on the NRHP as parts of Multiple Property Documentation projects. The historical contexts developed for those projects identify a period of significance for the development of hydropower in the state and indicate how an individual plant could have the historic significance and integrity necessary to the eligible for the NRHP (Fiege and Ore 1987).

The historic significance of some public utility projects in Minnesota has been addressed in the statewide context, “Federal Relief Construction in Minnesota, 1933-1941.” As with public utility projects completed as part of the Federal Relief Construction program in Minnesota, a private utility project is potentially eligible under Criterion A if it represents a particularly important project through its size and scope, or if it provided previously unavailable modern utilities. A utility property such as a power plant, might be eligible under Criterion C if it incorporates distinctive characteristics of a property type, period of development, or method of construction; a property of this type might also represent the work of a master, possess high artistic merit or demonstrate innovations in engineering and be eligible under Criterion C for that (Anderson 1991: F10).

The High Bridge Power Plant project was part of a large-scale development program intended to expand and modernize NSP’s existing power supply and distribution system. The first stage of the plant, completed in 1924, was a major project for St. Paul, as well as a notable addition to NSP’s regional power system. The High Bridge Power Plant project represents an important event in the local power industry. Certainly the power that NSP provided after 1924 to residential and industrial customers in St. Paul was an underlying factor in the rapid growth of the city during the 1920s. However, the High Bridge Power Plant and the electricity it supplied did not transform life in St. Paul or significantly shape its development trajectory as a growing city with a strong commercial and industrial component. There is not a strong case for the High Bridge Power Plant as having historic significance under Criterion A. The High Bridge Power Plant was described in the engineering press by the firm that designed it as a facility intended to meet the demands for power through economical, but not innovative, engineering. The High Bridge Power Plant project did not represent an advancement in power plant design for the electric power industry during the early 1920s. It did not introduce new technology, scale of operation, or management methods. The High Bridge Power Plant does not have historic significance as defined by Criterion C.

The 1940s and 1950s additions to the High Bridge Power Plant occurred more than 50 years ago and therefore are part of its historic record. The expansions of the plant kept it functionally useful to NSP and represent up-to-date equipment use and power plant and generator engineering. However, the additions to the plant are not associated with significant local events or changes in development patterns, and were not important

events in the electric power industry. The High Bridge Power Plant, as improved during the mid twentieth century, does not have historic significance.

The High Bridge Power Plant is not known to be associated with persons significant in local, state, or national history and is not identified as eligible under Criterion B. The property has not yielded, nor is it likely to yield, information important in prehistory or history, and therefore is recommended as not eligible under Criterion D.

4.1.5 Integrity

The High Bridge Power Plant has the overall appearance and feeling of an older power generating facility that has been improved over time. While its older portion is visible, it does not dominate the property.

Alterations to the material integrity of the 1924 portion of the plant include the removal of the parapet pediments and the replacement of the window sash in about half of the original window openings with aluminum-framed multi-paned sash. The pair of chimneys that rose above the boiler room has been removed. The No. 1 Screen House has been demolished, though the below-grade components of the facility remain in place. The large sign that was attached to the twin smoke stacks of the original plant for thirty years has been removed.

The expansion of the plant was always intended and the addition to the plant to house the two units added in the 1940s does not detract significantly from the integrity of the original portion. However, the somewhat larger addition of the 1950s and related facilities have a larger impact. The additions to the turbine and boiler rooms, the No. 2 Screen House, the Upper Levee Substation, the large external precipitators, the concrete stack erected in 1972, and the coal handling equipment in the coal yard combine to significantly alter the immediate setting of the 1924 portion of the plant.

The High Bridge Power Plant can no longer convey well the operation and scale of the 1924 facility. The functional improvements to the plant have diminished its historic integrity in design, materials, setting, and feeling.

4.1.6 Recommendation

The High Bridge Power Plant has long been a significant functional component of the NSP power system, but it does not have the historic significance and integrity to be eligible for listing on the NRHP. There is no potential for the property to be considered a contributing property within a historic district.

5.0 AREA OF POTENTIAL EFFECT SCOPING

5.1 VISUAL EFFECTS

The APE for visual effects is the geographic area in which the undertaking has the potential to introduce visual elements that may diminish or alter the setting of a historic property. In accordance with the common practice in the assessment of effects, an effect is an alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the NRHP. An undertaking will have an adverse visual effect on a historic property if the visual effect from the facility will noticeably diminish the integrity of one or more of the characteristics qualifying the property for inclusion in or eligibility for the NRHP; visual elements must be part of the character-defining features of eligibility of a historic property in order to have an adverse visual effect.

5.2 THE VISUAL EFFECTS APE

The boundaries of the APE were defined by the topography of the Mississippi River Valley in which the High Bridge Plant is located. Properties on top of the surrounding bluffs have views of the existing 570-ft. smoke stack, which figures prominently in many of the surrounding viewsheds. The plant, as well as the smoke stack, is visible from some bluff-edge properties. Glimpses of the smoke stack outside of the proposed APE's boundaries are possible, but the partial view and/or long distance limit the stack's impact on such views. While the smoke stack could be seen from most of the first tier of properties on the bluffs, the urban environment and dense vegetation generally prevented such views beyond that first tier. Similarly, in the large areas of properties in the river flats, particularly those south and west of the plant, there would likely be no visual impact from the proposed undertaking, although these areas are within the APE boundaries set to include the properties on the bluffs beyond.

Diverse property types in a variety of settings are included in the proposed visual effects APE. Several types of industrial properties are located along the river's northwest banks to take advantage of river and rail transportation. In addition to the High Bridge Plant itself, these properties include the Farmer's Equity Elevator and Sack House to the northeast; and to the southwest, the St. Paul Gas Light Company's Island Station Power Plant, the Archer Daniels Midland grain elevators near Randolph Avenue, the Schmidt Brewery, the Koch and Mobil oil tank farm site, and associated industrial rail corridors and spur lines. These industrial properties, located on the Mississippi River flats, are spread out over several miles of riverfront and do not appear to be part of an easily-defined historic district or cultural landscape. The area that once had many industrial operations has lost integrity with the demolition of the Chicago, St. Paul, Minneapolis & Omaha Railway and the recent clearing of the Koch and Mobil site. The recently constructed residential complexes on the Mississippi River flats have further altered the character of the river front in St. Paul.

Most of the APE, however, is comprised of residential neighborhoods, including the late nineteenth- and early-twentieth-century worker housing in the flats along the northwest banks of the river and the high-style mansions on the northern bluffs in the Hill District dating from the 1870s to the 1910s. The moderate middle-class homes dating from the late nineteenth and early twentieth centuries on the bluffs of Cherokee Heights in the southeast portion of the APE and the Dayton's Bluff residential area on the east side of the Mississippi River established as a wealthy enclave during the early years of the city and expanded during the 1880s are included in the APE. A portion of St. Paul's downtown, primarily those areas immediately adjacent to the river, is within the APE, as are the mostly modern industrial buildings on the river flats south of downtown. The APE extends to the north to include the Minnesota State Capitol.

5.3 OBSERVATIONS ON PROJECT EFFECTS

Figure 2 illustrates the properties inventoried on the SHPO database, which include those that have been listed on the NRHP, determined eligible for the NRHP, and have not been evaluated for NRHP eligibility. The 106 Group has not surveyed the proposed visual effects APE for historic properties, nor has it analyzed the effects to these properties within the APE. However, several observations about potential effects to these properties can be made.

While the proposed visual effects APE encompasses a large area due to the height of the High Bridge Plant's smoke stack, the effects resulting from the loss of the stack are anticipated to be minimal. The removal of an object from the viewshed (i.e. the removal of the existing smoke stack) can be considered to be an effect, as it would alter the view from historic properties, and, in some instances, alter a view towards historic properties. For most historic properties within the APE, this alteration to the viewshed would not be considered an *adverse* effect.

In order for an effect to be considered *adverse* the undertaking would need to introduce visual elements that diminish or alter the setting, including the landscape, where the setting is a character-defining feature of a historic property makes it eligible for listing on the NRHP. For example, the smoke stack is visible from numerous properties within the Historic Hill District, a NRHP-listed district of primarily residential properties on the bluffs of the Mississippi River. The existing power plant does not contribute to the setting of the district and its removal would not adversely affect the historic integrity of the characteristics of either the district as a whole, nor any of the individual contributing resources within the district. Consequently, the smoke stack's removal would not be considered an *adverse* effect on the Historic Hill District or individual properties within it. The views from bluff edge properties in the Historic Hill District over the Mississippi River and its flats has not been noted as a significant component of the district's setting. In any case, this view has a complex mix of historic and modern elements and the alteration of one property, even a prominent one, in that view would not significantly affect the view.

The proposed new power plant includes two smoke stacks that would be approximately one-third the height of the present one at 150 to 200 feet. The new plant building would be somewhat smaller than the existing one. Both the new smoke stacks and the plant would be less prominent components in views towards the power plant site from the river bluff edges. It seems likely that the new construction would have no *adverse* effect on the Historic Hill District. The situation would be the same for the other historic properties within the APE, where the removal of the existing plant and tall stack and subsequent construction of a smaller plant and shorter stacks might be considered an enhancement to the views of the Mississippi River flats.

6.0 SUMMARY AND RECOMMENDATIONS

The 106 Group completed a Phase I architectural history investigation for the High Bridge Power Plant property located at 501 Shepard Road, St. Paul, Ramsey County, Minnesota, the property that would be directly impacted by the project. The 106 Group recommends that the property (RA-SPC-3322) is not eligible for individual listing on the NRHP due to lack of historical significance. The property was found also to be not eligible for listing on the NRHP as a contributing property within an existing or potential historic district.

Because the High Bridge Power Plant is recommended as not eligible for listing on the NRHP, the project would have no direct effects to historic properties. The APE scoping study established a proposed visual effects APE. This report offers some observations about effects that the project would have on properties within the visual effects APE, but does not include a detailed evaluation of the effects of the project. However, the overall observation is that the proposed project is unlikely to have an adverse effect on the historic properties within the APE.

REFERENCES CITED

Anderson, R.

- 1991 National Register of Historic Places Multiple Property Documentation Form “Federal Relief Construction in Minnesota, 1933-1941”. On file at the Minnesota State Historic Preservation Office, Minnesota Historical Society, St. Paul, Minnesota..

Fiege, Mart T. and Janet Ore

- 1987 Electric Power Plants of Utah. NRHP Multiple Property Nomination Form. Electronic document, <http://www.nr.nps.gov/multiples/64500664.pdf>, accessed December 13, 2004.

High Bridge—A Power Giant for the Central Northwest

- 1925 *Byllesby Monthly News*. October: 10

High Bridge Plant has Largest Electric Sign in St. Paul

- 1929 *Byllesby Monthly News*. August:6

High Bridge Steam Plant at St. Paul (High Bridge Steam Plant)

- 1924 *Power*. 60(26): 1006-1013.

Meyer, Herbert W.

- 1957a *Builders of Northern States Power Company*. Northern States Power, Minneapolis.
1957b *A History of the Divisions of the Northern States Power Company*. Northern States Power, Minneapolis.

National Park Service

- 1983 Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation. *Federal Register* 48(190):44716-44740.
1995 *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*. Government Printing Office, Washington, D.C.

New High Bridge Power Plant at St. Paul Placed in Operation

- 1924 *Byllesby Monthly News*. August:5

Northern States Power Co. (NSP)

- 1922 *Annual Report for the Year Ended December 31, 1922*. Northern States Power Company, Minneapolis.
1923 *Annual Report for the Year Ended December 31, 1923*. Northern States Power Company, Minneapolis.

1924 *Annual Report for the Year Ended December 31, 1922.* Northern States Power Company, Minneapolis.

1940 *Annual Report for the Year Ended December 31, 1940.* Northern States Power Company, Minneapolis.

1941 *Annual Report for the Year Ended December 31, 1941.* Northern States Power Company, Minneapolis.

1942 *Annual Report for the Year Ended December 31, 1942.* Northern States Power Company, Minneapolis.

1943 *Annual Report for the Year Ended December 31, 1943.* Northern States Power Company, Minneapolis.

1947 *Annual Report for the Year Ended December 31, 1947.* Northern States Power Company, Minneapolis.

1956 *Annual Report for the Year Ended December 31, 1956.* Northern States Power Company, Minneapolis.

1961 *Annual Report for the Year Ended December 31, 1961.* Northern States Power Company, Minneapolis.

1984 *High Bridge Plant.* Northern States Power Co., Minneapolis.

1996 "Major Plant Historical Events." Typescript, High Bridge Plant Engineering Department.

Phelps, Gary H.

1984 *St. Paul Gas Light Company's Island Station National Register of Historic Places Nomination Form.* On File at SHPO, St. Paul.

St. Paul Dispatch(StPD) [St. Paul, Minnesota]

1922 "Northern States to Build \$5,000,000 Plant Here." 27 December. St. Paul, Minnesota.

Sanborn Map Publishing Company

1926 *St. Paul, Minnesota.* Sanborn Map Publishing Company, New York.

1951 *St. Paul, Minnesota.* Sanborn Map Publishing Company, New York.

Xcel Energy

2004a Draft Application to the Minnesota Environmental Quality Board for a Generative Plant Site Permit: High Bridge Combined Cycle Project. November 24, 2004 version.

2004b Riverside Plant. Electronic document, http://www.xcelenergy.com/XLWEB/CDA/0,2914,1-1-1_4795_4797_4014-3638-0_0_0-0,00.html, accessed December 9, 2004.

2004c High Bridge Plant. Electric document, http://www.xcelenergy.com/XLWEB/CDA/0,2914,1-1-1_4795_4797_4014-3660-0_0_0-0,00.html, accessed December 8, 2004.

APPENDIX A: TABLE OF PREVIOUSLY INVENTORIED PROPERTIES

High Bridge Combined Cycle Project
Phase I Architectural History Evaluation and Area of Potential Effect Scoping

Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-0070	House	212 Ann Street S			X
RA-SPC-0071	William G. Gronewald House	213 Ann St. S			X
RA-SPC-0078	House	358 Arbor St. S			X
RA-SPC-0079	House	387 Arbor St. S			X
RA-SPC-0080	House	392 Arbor St. S			X
RA-SPC-0081	House	411 Arbor St. S			X
RA-SPC-0082	House	425 Arbor St. S			X
RA-SPC-0083	House	443 Arbor St. S			X
RA-SPC-0084	John H. Lauer House	449 Arbor St. S			X
RA-SPC-0121	Omaha Iron & Brass Factory	626 Armstrong Ave. W			X
RA-SPC-0122	Olivet Methodist Episcopal Church	793 Armstrong Ave. W			X
RA-SPC-0123	Wenzel Horej's House	772 Armstrong Ave. W			X
RA-SPC-0124	St. Peter's Evangelical Lutheran Church	849-855 Armstrong Ave. W			X
RA-SPC-0125	House	998 Armstrong Ave. W			X
RA-SPC-0229	Minnesota State Capitol	Aurora Ave. between Cedar & Park Sts.	X		
RA-SPC-0259	Scherfenberg House	241 Banfil St. W			X
RA-SPC-0260	House	253 Bankfil St. W			X
RA-SPC-0261	O'Donnell House	265 Banfil St. W			X
RA-SPC-0262	Cominsky House	266 Banfil St. W			X
RA-SPC-0263	Wolfgruber House	267 Banfil St. W			X
RA-SPC-0264	Henry Mandehr House	274 Banfil St. W			X
RA-SPC-0265	Amos House	276 Banfil St. W			X
RA-SPC-0266	Vander Heyden House	280 Banfil St. W			X
RA-SPC-0267	Horn/Levy House	286 Banfil St. W			X
RA-SPC-0268	House	287 Banfil St. W			X
RA-SPC-0269	House	294 Banfil St. W			X

High Bridge Combined Cycle Project
Phase I Architectural History Evaluation and Area of Potential Effect Scoping

Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-0270	Theodore Bohland House	296 Banfil St. W			X
RA-SPC-0271	Andrew Schultz House	298 Banfil St. W			X
RA-SPC-0272	House	424 Banfil St. W			X
RA-SPC-0273	House	455 Banfil St. W			X
RA-SPC-0276	Farwell/Jameson House	20 Bates Ave. N			X
RA-SPC-0277	Henry Breuer House	118 Bates Ave. N			X
RA-SPC-0290	House	414 Bay St. N			X
RA-SPC-0291	House	500 Bay St. N			X
RA-SPC-0292	House	513 Bay St. N			X
RA-SPC-0293	House	372 Bay St. S			X
RA-SPC-0294	House	407 Bay St. S			X
RA-SPC-0295	House	408 Bay St. S			X
RA-SPC-0296	House	425 Bay St. S			X
RA-SPC-0297	Commercial Building	449 Bay St. S (729 James Ave.)			X
RA-SPC-0298	A. Wieland House	512 Bay St. S			X
RA-SPC-0299	House	519 Bay St. S			X
RA-SPC-0300	House	757 Bayard Ave. W			X
RA-SPC-0301	House	775 Bayard Ave. W			X
RA-SPC-0302	George Spurr House	871 Bayard Ave. W			X
RA-SPC-0303	House	882 Bayard Ave. W			X
RA-SPC-0304	Holman Field Administration Building	644 Bayfield St.	X		
RA-SPC-0341	House	16 Benhill Road			X
RA-SPC-0342	House	30 Benhill Rd. S			X
RA-SPC-0343	House	969 Benhill Rd. S			X
RA-SPC-0347	Rowhouse (Razed)	429-439 Bidwell St. S			X
RA-SPC-0461	Frederick Banholzer House	681 Butternut Ave. W			X

High Bridge Combined Cycle Project
Phase I Architectural History Evaluation and Area of Potential Effect Scoping

Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-0462	House	711 Butternut Ave. W			X
RA-SPC-0463	House	731 Butternut Ave. W			X
RA-SPC-0464	House	763 Butternut Ave. W			X
RA-SPC-0465	House	771 Butternut Ave. W			X
RA-SPC-0466	House	775 Butternut Ave. W			X
RA-SPC-0467	House	787 Butternut Ave. W			X
RA-SPC-0474	House	663 Canton St. S			X
RA-SPC-0475	House	703 Canton St. S			X
RA-SPC-0557	Minnesota Historical Society	25 Constitution Ave.	X		
RA-SPC-0594	J.E. Sullivan House	285 Cherokee Ave. S			X
RA-SPC-0595	William C. Pfeiffer House	308 Cherokee Ave. S			X
RA-SPC-0596	House	354 Cherokee Ave. S			X
RA-SPC-0597	Duplex	432-434 Cherokee Ave. S			X
RA-SPC-0598	House	456 Cherokee Ave. S			X
RA-SPC-0599	House	643 Cherokee Ave. S			X
RA-SPC-0600	House	647 Cherokee Ave. S			X
RA-SPC-0607	House	655 Cherry St. E			X
RA-SPC-0608	House	656 Cherry St. E			X
RA-SPC-0609	House	660 Cherry St. E			X
RA-SPC-0610	Henry F. Schlattmann House	666 Cherry St. E			X
RA-SPC-0613	Charles Emmert House	272 Chestnut St. S			X
RA-SPC-0614	House	276 Chestnut St. S			X
RA-SPC-0615	House	321 Chestnut St. S			X
RA-SPC-0616	Chestnut Place	345 Chestnut St. S			X
RA-SPC-0619	Schroeckenstein House	656 Chippewa Ave. S			X
RA-SPC-0645	House	372 Clifton St. S			X

High Bridge Combined Cycle Project
Phase I Architectural History Evaluation and Area of Potential Effect Scoping

Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-0646	House	385 Clifton Ave. E			X
RA-SPC-0647	House	212 Colborne St. S			X
RA-SPC-0648	House	227 Colborne St. S			X
RA-SPC-0649	Duplex	228 Colborne St. S			X
RA-SPC-0650	House	231 Colborne St. S			X
RA-SPC-0651	House	321 Colborne St. S			X
RA-SPC-0652	House	327 Colborne St. S			X
RA-SPC-0653	Joseph Kimmel House	339 Colborne St. S			X
RA-SPC-0654	House	360 Colborne St. S			X
RA-SPC-0655	Bridgeview School	360 Colborne St. S			X
RA-SPC-0657	Charles T. Miller Hospital	125 College Ave. W			X
RA-SPC-0658	Roosevelt Hospital	145 College Ave. W			X
RA-SPC-0659	Apartment	162 College Ave. W			X
RA-SPC-0660	Apartment	168 College Ave. W			X
RA-SPC-0662	House	89 Colorado St. W			X
RA-SPC-0798	House	69 Congress St. W			X
RA-SPC-0799	Southward Double House	86-88 Congress St. W			X
RA-SPC-0800	George Stenger House	131 Congress St. W			X
RA-SPC-0801	House	134 Congress St. W			X
RA-SPC-0802	Hubbard House	174 Congress St. W			X
RA-SPC-0803	House	186 Congress St. W			X
RA-SPC-0804	House	227 Congress St. W			X
RA-SPC-0829	John D. O'Brien House	1 Crocus Hill	X		
RA-SPC-0830	Rice-Merriam House	4 Crocus Hill	X		
RA-SPC-0831	T.L. Schurmeier House	4 Crocus Hill	X		
RA-SPC-0832	John L. Erdahl House	7-9 Crocus Hill	X		

High Bridge Combined Cycle Project
Phase I Architectural History Evaluation and Area of Potential Effect Scoping

Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-0833	Charles W. Briggs House	10 Crocus Hill	X		
RA-SPC-0834	Clarence H. Johnston, Jr. House	11 Crocus Hill	X		
RA-SPC-0835	Edgar & Agnes Ober House	13 Crocus Hill			X
RA-SPC-0836	Arthur H. Savage House	15 Crocus Hill	X		
RA-SPC-0837	F.E. Ford House	5 Crocus Pl.	X		
RA-SPC-0838	W.H.S. Wright House	9 Crocus Pl.	X		
RA-SPC-0839	House	10 Crocus Pl.	X		
RA-SPC-0840	K.D. Dunlap House	15 Crocus Pl.	X		
RA-SPC-0841	Grant S. Macartney House	18 Crocus Pl.	X		
RA-SPC-0842	House	27 Crocus Pl.	X		
RA-SPC-0843	R.L. Wright House	30 Crocus Pl.	X		
RA-SPC-0844	Leo Goodkind House	40 Crocus Pl.			X
RA-SPC-0845	Dr. Harry P. Ritchie House	46 Crocus Pl.	X		
RA-SPC-0846	Aberle House	54 Crocus Pl.			X
RA-SPC-0890	House	317 Daly St. S			X
RA-SPC-0891	J.E. Zalnsky House	374 Daly St. S			X
RA-SPC-0892	House	377 Daly St. S			X
RA-SPC-0893	House	378 Daly St. S			X
RA-SPC-0894	House	384 Daly St. S			X
RA-SPC-0895	George Mitsch Sr. House	395 Daly St. S			X
RA-SPC-0896	House	400 Daly St. S			X
RA-SPC-0897	Antone Wanshura House	404 Daly St. S			X
RA-SPC-0898	House	424 Daly St. S			X
RA-SPC-1035	Lloyd Peabody House	645 Delaware Ave. S			X
RA-SPC-1036	House	649 Delaware Ave. S			X
RA-SPC-1043	House	42 Delos St. W			X

High Bridge Combined Cycle Project
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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-1044	Grady Flats	46-52 Delos St. W			X
RA-SPC-1045	Apartment	61 Delos St. W			X
RA-SPC-1046	Edward & Elizabeth Heimbach House & Carriage House	64 Delos St. W		X	
RA-SPC-1047	House	120 Delos St. W			X
RA-SPC-1048	Steiner House	174 Delos St. W			X
RA-SPC-1090	House	14 Douglas St. N			X
RA-SPC-1091	House	20 Douglas St. N			X
RA-SPC-1092	House	22 Douglas St. N			X
RA-SPC-1093	Apartment	52 Douglas St. N			X
RA-SPC-1094	Apartment	58 Douglas St. N			X
RA-SPC-1095	Rowhouse	66-72 Douglas St. N			X
RA-SPC-1096	Anton Jurka/Blanche Yurka House	16 Douglas St. S			X
RA-SPC-1097	Stone Wall	116 Douglas St. N			X
RA-SPC-1098	House	158 Dousman St. S			X
RA-SPC-1099	Body Shop	159 Dousman St. S			X
RA-SPC-1108	House	374 Duke St. N			X
RA-SPC-1109	House	263 Duke St. S			X
RA-SPC-1110	Joseph Wenzl House	271 Duke St. S			X
RA-SPC-1111	House	296 Duke St. S			X
RA-SPC-1112	House	343 Duke St. S			X
RA-SPC-1113	Melchoir & Whilhelmina Funk House	398 Duke St. S			X
RA-SPC-1114	House	413 Duke St S			X
RA-SPC-1163	Kreager House	353-355 Emma St. W			X
RA-SPC-1164	House	369 Emma St. W			X
RA-SPC-1179	Jacob Lauer House	252 Erie St. S			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-1180	House	255 Erie St. S			X
RA-SPC-1181	John Ferber House	259 Erie St.			X
RA-SPC-1182	Ourada House	263 Erie St. S			X
RA-SPC-1183	Congregation Union Church	275 Erie St. S			X
RA-SPC-1184	House	317 Erie St. S			X
RA-SPC-1185	House	323 Erie St. S			X
RA-SPC-1186	House	368 Erie St. S			X
RA-SPC-1187	House	388 Erie St. S			X
RA-SPC-1188	House	394 Erie St. S			X
RA-SPC-1203	Junior Pioneer Association Building	192 Exchange St. W		X	
RA-SPC-1204	House	225-227 Exchange St. S			X
RA-SPC-1205	Stoddard Block	226-234 Exchange St. S			X
RA-SPC-1206	Alexander Ramsey House	265 Exchange St.	X		
RA-SPC-1207	Forepaugh-Hammond House	276 Exchange St. S	X		
RA-SPC-1208	Frank Jansen House	278-280 Sherman St.			X
RA-SPC-1209	Knox-Austin Rogers House	284 Exchange St. S			X
RA-SPC-1210	George Hess House	288 Exchange St. S			X
RA-SPC-1211	House	187 Grand Ave. W			X
RA-SPC-1212	Rogers-Johnson House	306 Exchange St. S			X
RA-SPC-1213	Little Sisters Of The Poor	330 Exchange St. S			X
RA-SPC-1217	Frank B. Kellogg House	633 Fairmount Ave. W	X		
RA-SPC-1218	R.L. Ware House	645 Fairmount Ave. W	X		
RA-SPC-1219	Dr. Henry Hoyt House	651 Fairmount Ave. W	X		
RA-SPC-1220	R.C. Helbert House	677 Fairmount Ave. W	X		
RA-SPC-1221	Moreland/Dawson House	682 Fairmount Ave. W	X		
RA-SPC-1222	Martha Braley House	695 Fairmount Ave. W	X		

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-1223	G.H. Ralston House	701 Fairmount Ave. W	X		
RA-SPC-1224	James T. Clark House	702 Fairmount Ave. W	X		
RA-SPC-1225	G.L. Beardslee House	703 Fairmount Ave. W	X		
RA-SPC-1284	Farwell, Ozmun & Kirk Co.	104-105 Fillmore St. W			X
RA-SPC-1288	House	168 Forbes Ave. W			X
RA-SPC-1289	House	172 Forbes Ave.			X
RA-SPC-1290	House	276 Forbes Ave. W			X
RA-SPC-1291	House	284 Forbes Ave. W			X
RA-SPC-1292	House	288 Forbes Ave. W			X
RA-SPC-1310	Brennan's Livery And Boarding Stable	167 Grand Ave. W			X
RA-SPC-1311	Harriet Bishop School (Razed)	181 Grand Ave. W			X
RA-SPC-1312	House	191-193 Grand Ave. W			X
RA-SPC-1313	Commercial Building	208 Grand Ave. W			X
RA-SPC-1314	Apartment	241 Grand Ave. W			X
RA-SPC-1315	Double House	343-345 Grand Ave. W			X
RA-SPC-1316	House	351 Grand Ave. W			X
RA-SPC-1317	House	387 Grand Ave. W			X
RA-SPC-1318	House	413 Grand Ave. W			X
RA-SPC-1319	House	423 Grand Ave. W			X
RA-SPC-1320	Double House	445-447 Grand Ave. W			X
RA-SPC-1321	Jared How House	455 Grand Ave. W		X	
RA-SPC-1434	House	389 Fulton St. S			X
RA-SPC-1435	J. Schroepfer House	450 Fulton St. S			X
RA-SPC-1454	House	73 Garfield St. N			X
RA-SPC-1455	House	69 Garfield Ave. S			X
RA-SPC-1456	House	74 Garfield St. S			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-1457	House	89 Garfield St. S			X
RA-SPC-1458	House	108 Garfield St. S			X
RA-SPC-1507	Esch-Skok House	267 Goodhue St. W			X
RA-SPC-1508	Fable, Philip, House	273 Goodhue St. W			X
RA-SPC-1509	John Skok House	281 Goodhue St. W			X
RA-SPC-1510	Otto Penshorn House	289 Goodhue St. W			X
RA-SPC-1511	Theobold House	297 Goodhue St. W			X
RA-SPC-1512	House	310 Goodhue St. W			X
RA-SPC-1513	Albert Wolf House	318 Goodhue St. W			X
RA-SPC-1514	House	430 Goodhue St. W			X
RA-SPC-1515	House	431 Goodhue St. W			X
RA-SPC-1516	House	461 Goodhue St. W			X
RA-SPC-1517	House	473 Goodhue St. W			X
RA-SPC-1518	Schmitz House	182 Goodrich Ave. W		X	
RA-SPC-1519	Julia Schroeder House	183 Goodrich Ave.		X	
RA-SPC-1520	Myrick, Nathan, Double House	199-201 Goodrich Ave. W		X	
RA-SPC-1521	Robert C. Schnelle Duplex	206-208 Goodrich Ave. W		X	
RA-SPC-1522	Mrs. Nicholas Lehman Fourplex	211 Goodrich Ave. W		X	
RA-SPC-1523	James Furnell House	192 Goodrich Ave. W		X	
RA-SPC-1524	Robert C. Schnelle House	212-214 Goodrich Ave. W		X	
RA-SPC-1525	Francis Schram House (Double House)	236-238 Goodrich Ave. W		X	
RA-SPC-1526	Hubert Roelde House	239 Goodrich Ave. W		X	
RA-SPC-1527	Phillips House	218 Goodrich Ave. W		X	
RA-SPC-1528	G. Hennig House	240 Goodrich Ave. W		X	
RA-SPC-1529	Jacob Karger House	244 Goodrich Ave. W		X	
RA-SPC-1530	John Miner House	256 Goodrich Ave. W		X	

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-1531	Frank Funk House	262 Goodrich Ave. W		X	
RA-SPC-1532	Ringwald House	266 Goodrich Ave. W		X	
RA-SPC-1533	Koch, Christina, House	270 Goodrich Ave. W		X	
RA-SPC-1534	Koch, Christina, House	274 Goodrich Ave. W		X	
RA-SPC-1535	House	276 Goodrich Ave. W		X	
RA-SPC-1536	Gutman, Joseph House	291 Goodrich Ave. W			X
RA-SPC-1537	House	301 Goodrich Ave. W			X
RA-SPC-1538	Goodrich Avenue Presbyterian Church	305 Goodrich Ave. W			X
RA-SPC-1539	House	314 Goodrich Ave. W			X
RA-SPC-1540	House	318 Goodrich Ave. W			X
RA-SPC-1541	House	320 Goodrich Ave. W			X
RA-SPC-1542	House	330 Goodrich Ave. W			X
RA-SPC-1543	House	336 Goodrich Ave. W			X
RA-SPC-1544	House	346 Goodrich Ave. W			X
RA-SPC-1545	House	357 Goodrich Ave. W			X
RA-SPC-1546	House	401 Goodrich Ave. W			X
RA-SPC-1547	House	405 Goodrich Ave. W			X
RA-SPC-1548	House	412 Goodrich Ave. W			X
RA-SPC-1549	House	428 Goodrich Ave. W			X
RA-SPC-1550	House	432 Goodrich Ave. W			X
RA-SPC-1551	House	434 Goodrich Ave. W			X
RA-SPC-1594	Bridge	Grace St. W & Osceola Ave. S			X
RA-SPC-1595	Charles Hausler House	526 Grace St. W			X
RA-SPC-1597	Arthur G. Rice House	475 Grand Hill W.	X		
RA-SPC-1598	Frederick Weyerhauser House	480 Grand Hill W.	X		
RA-SPC-1599	John Jackson House	483 Grand Hill W.	X		

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-1643	Howard Wheeler House	226 Grotto St. S	X		
RA-SPC-1700	Fred Hunt House	245 Hamline Ave. S			X
RA-SPC-1715	House	277 Harrison Ave. W			X
RA-SPC-1716	William S. Adams House	287 Harrison Ave. W			X
RA-SPC-1717	House	290 Harrison Ave. W			X
RA-SPC-1718	House	299 Harrison Ave. W			X
RA-SPC-1719	House	306 Harrison Ave. W			X
RA-SPC-1720	House	310 Harrison Ave. W			X
RA-SPC-1721	House	314 Harrison Ave. W			X
RA-SPC-1722	House	524 Harrison Ave. W			X
RA-SPC-1856	House	889-891 Hudson Rd. E			X
RA-SPC-1857	Adolph G. Wille House	893 Hudson Rd. E			X
RA-SPC-1926	Leo Kramer House	294 Irvine Ave.			X
RA-SPC-1927	Edmund Cross House	306 Irvine Ave.			X
RA-SPC-1928	House	318 Irvine Ave.			X
RA-SPC-1929	J.H. Skinner House	322 Irvine Ave.			X
RA-SPC-1930	House	326 Irvine Ave. W			X
RA-SPC-1931	House	358 Irvine Ave.			X
RA-SPC-1933	Condominiums	1-8 Irvine Park			X
RA-SPC-1934	Condominiums	9-16 Irvine Park			X
RA-SPC-1935	Henry M. Knox House	26 Irvine Park	X		
RA-SPC-1936	Parker-Marshall House	30 Irvine Park (250 Sherman)	X		
RA-SPC-1937	Charles L. Wood House	32 Irvine Park (255 Sherman)	X		
RA-SPC-1938	Murray-Lanpher House	35 Irvine Park	X		
RA-SPC-1939	Eaton- Smyth House (Razed)	38 Irvine Park			X
RA-SPC-1940	Robbins-Semple House	40 Irvine Park	X		

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-1941	Henry J. Horn House	50 Irvine Park	X		
RA-SPC-1942	Eaton-Mylar House	53 Irvine Park			X
RA-SPC-1943	John McDonald House	56 Irvine Park	X		
RA-SPC-1944	Dr. Justus Ohage House	59 Irvine Park	X		
RA-SPC-1953	Double House	40-42 Isabel St. W			X
RA-SPC-1954	Edlund House	41 Isabel St. W			X
RA-SPC-1955	House	54 Isabel St. W			X
RA-SPC-1956	House	57 Isabel St. W			X
RA-SPC-1957	Tilleman House	116 Isabel St. W			X
RA-SPC-1958	Eugene & Christina Villaume House	123 Isabel St. W			X
RA-SPC-1959	Double House	136-138 Isabel St. W			X
RA-SPC-1960	Schulte House	162-164 Isabel St. W			X
RA-SPC-1961	House	169 Isabel St. W			X
RA-SPC-1962	Moosebrugger House	175 Isabel St. W			X
RA-SPC-1963	House	178 Isabel St. W			X
RA-SPC-1964	Yoerg, Anthony, Sr. House	215 Isabel St. W	X		
RA-SPC-1965	House	224 Isabel Ave. W			X
RA-SPC-1966	House	225 Isabel St. W			X
RA-SPC-1967	John A. Seeger House	231 Isabel St. W			X
RA-SPC-1994	House	704 James Ave. W			X
RA-SPC-1995	House	712 James Ave. W			X
RA-SPC-1996	House	722 James Ave. W			X
RA-SPC-1997	John & Anna Long House	826 James Ave. W			X
RA-SPC-2002	James Murname House	228 Maria Ave. N			X
RA-SPC-2003	Erastus Palmer House	230 Maria Ave. N			X
RA-SPC-2004	Louis Wolterstorff House	231 Maria Ave. N			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-2005	House	232 Maria Ave. N			X
RA-SPC-2006	Walter Rasmussen House	235 Maria Avenue N.			X
RA-SPC-2007	Rev. William Rotert House	236 Maria Ave. N			X
RA-SPC-2008	Orant Nelson House	237 Maria Ave. N			X
RA-SPC-2009	Shields Double House	238-240 Maria Ave. N			X
RA-SPC-2010	Duplex	242-244 Maria Ave. N			X
RA-SPC-2011	Archibald And Jacob Rockstroh House	243 Maria Avenue N			X
RA-SPC-2012	William Daley House	245 Maria Ave. N			X
RA-SPC-2013	Duplex	246-248 Maria Ave. N			X
RA-SPC-2014	House	247 Maria Ave. N			X
RA-SPC-2015	Armbruster Double House	251-253 Maria Ave. N			X
RA-SPC-2282	Commercial Building	805 Hudson Road			X
RA-SPC-2283	Commercial Building	841 Hudson Road			X
RA-SPC-2284	Service Station	847 Hudson Road			X
RA-SPC-2285	House	857 Hudson Road			X
RA-SPC-2286	House	861 Hudson Road			X
RA-SPC-2287	House	863-865 Hudson Road			X
RA-SPC-2288	House	869 Hudson			X
RA-SPC-2289	House	877 Hudson Road			X
RA-SPC-2290	House	881 Hudson Road			X
RA-SPC-2291	Schnell Duplex	889-891 Hudson Road			X
RA-SPC-2292	Adolph Wille House	893 Hudson Road			X
RA-SPC-2294	House	715 Plum St.			X
RA-SPC-2404	Wesley Jameson House	659 Surrey Ave.			X
RA-SPC-2405	Archibald Williams House	661 Surrey Ave.			X
RA-SPC-2406	Louis Hanson House	662 Surrey Ave.			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-2407	House	663 Surrey Ave.			X
RA-SPC-2408	Isaac Seddon Double House	664-666 Surrey Ave.			X
RA-SPC-2409	Ayers Duplex	667-669 Surrey Ave.			X
RA-SPC-2410	House	668 Surrey Ave.			X
RA-SPC-2411	Joseph Armbruster House	672 Surrey Ave.			X
RA-SPC-2423	Apartment	652 Conway St.			X
RA-SPC-2424	Weber Duplex	657 Conway St.			X
RA-SPC-2425	Duplex	658 Conway St.			X
RA-SPC-2426	Braun Duplex	659 Conway St.			X
RA-SPC-2427	House	662 Conway St.			X
RA-SPC-2428	Robert & Ellen Gill House	663 Conway St.			X
RA-SPC-2430	House	667 Conway St.			X
RA-SPC-2431	Meline Duplex	668-670 Conway St.			X
RA-SPC-2432	House	671 Conway St.			X
RA-SPC-2481	House	661 Third St. E			X
RA-SPC-2482	Bell Triple House	663-667 Third St. E			X
RA-SPC-2483	Thomas Swanson House	669 Third St. E			X
RA-SPC-2612	Julia Knauff House	654 Fourth St. E			X
RA-SPC-2613	House	657 Fourth St. E			X
RA-SPC-2614	Bell Row	658-666 Fourth St. E			X
RA-SPC-2615	Gottlieb J. Schwartz House	659 Fourth St. E			X
RA-SPC-2616	Bell Duplex	661-63 Fourth St. E			X
RA-SPC-2617	Thomas Davis House	665 Fourth St. E			X
RA-SPC-2618	George W. Blood House	667 Fourth St. E			X
RA-SPC-2619	Tandy Row	668 Fourth St. E			X
RA-SPC-2935	Schneider-Bulera House	365 Michigan St. W			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-3025	Durkee House	58 Prospect Blvd. W			X
RA-SPC-3026	Residence	76 Prospect Blvd. W			X
RA-SPC-3027	Julius Villaume House	148 Prospect Blvd. W			X
RA-SPC-3028	Villaume House	172 Prospect Blvd. W			X
RA-SPC-3029	Residence	176 Prospect Blvd.			X
RA-SPC-3030	German Presbyterian Bethlehem Church	311 Ramsey St.	X		
RA-SPC-3031	A. Brown House	319 Ramsey St.			X
RA-SPC-3032	J. Lorch House	325 Ramsey St.			X
RA-SPC-3033	House	331 Ramsey St.			X
RA-SPC-3034	Elizabeth Rogers House	344 Ramsey St. W			X
RA-SPC-3035	Ramsey Terrace	333-349 Ramsey St.			X
RA-SPC-3036	Residence	342 Ramsey St. W			X
RA-SPC-3037	Bork House	351 Ramsey St. W			X
RA-SPC-3038	Residence	353 Ramsey St. W			X
RA-SPC-3039	Residence	357 Ramsey St. W			X
RA-SPC-3040	Residence	359 Ramsey St. W			X
RA-SPC-3041	Residence	367 Ramsey St. W			X
RA-SPC-3042	Clement Haupers House	377 Ramsey St. W			X
RA-SPC-3100	Residence	249 Richmond St. S.			X
RA-SPC-3101	Residence	253 Richmond St. S.			X
RA-SPC-3107	Chicago, St. Paul, Minneapolis & Omaha Shops	560 Randolph Ave. W.			X
RA-SPC-3108	Columbia Hotel	727 Randolph Ave. W.			X
RA-SPC-3109	Ranzinger House	744 Randolph Ave. W.			X
RA-SPC-3110	Chemical House #5	754 Randolph Ave. W.			X
RA-SPC-3111	Residence	783 Randolph Ave. W.			X
RA-SPC-3112	Leonard Ayd House	806 Randolph Ave. W.			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-3113	Residence	865 Randolph Ave. W.			X
RA-SPC-3114	Mardl House	877 Randolph Ave. W.			X
RA-SPC-3115	Thomsen Store	893 Randolph Ave. W.			X
RA-SPC-3116	Schmidt Building	917 Randolph Ave. W.			X
RA-SPC-3117	Residence	1024 Randolph Ave. W.			X
RA-SPC-3177	Robert Street Bridge	Robert St. S. south of Kellogg Blvd.			X
RA-SPC-3178	American Manufacturing Company	63 Robert St. S.			X
RA-SPC-3179	Illinois Glass Company	149 Robert St. S.			X
RA-SPC-3180	Factory/ Warehouse	151-157 Robert St. S.			X
RA-SPC-3227	Residence	226 Ryan Ave. W.			X
RA-SPC-3228	Charles Symonds House	234 Ryan Ave.			X
RA-SPC-3229	Humphrey-Willis House	240 Ryan Ave.			X
RA-SPC-3230	Joseph Thiessen House	292 Ryan Ave. W.			X
RA-SPC-3231	Frank Jansen House	310 Ryan Ave. W.			X
RA-SPC-3321	St. Paul Municipal Elevator And Sack House	266 Shepard Rd. W.	X	X	
RA-SPC-3322	Northern States Power High Bridge Plant	501 Shepard Rd. W.			X
RA-SPC-3323	St. Paul Gas Light Co. Plant	ca. 850 Shepard Rd.			X
RA-SPC-3348	Frank Hankey House	310 Sherman St.			X
RA-SPC-3349	Benjamin T. Mciver House	655 Short St. E.			X
RA-SPC-3350	Paul Deebach House	664 Short St. E.			X
RA-SPC-3399	Residence	229 Smith Ave. N. (formerly Oak)			X
RA-SPC-3400	Residence	312 Smith Ave. N.			X
RA-SPC-3401	Joseph Brings House	314 Smith Ave. N.			X
RA-SPC-3402	St. Luke's Hospital	333 Smith Ave. N.			X
RA-SPC-3403	Double Residence	365-367 Smith Ave. N.			X
RA-SPC-3404	Residence	383 Smith Ave. N.			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-3405	Snelling House Hotel	425 Smith Ave. N.		X	
RA-SPC-3406	Anthony Waldman House	445 Smith Ave. N.		X	
RA-SPC-3407	Koch House/Avery Adams House	454 Smith Ave. N.		X	
RA-SPC-3408	Residence	476 Smith Ave.			X
RA-SPC-3409	Residence	479 Smith Ave.			X
RA-SPC-3410	William P. Haag House	489 Smith Ave. N.			X
RA-SPC-3465	Residence	334 St. Clair Ave. W.			X
RA-SPC-3466	Boedecker House	338 St. Clair Ave. W.			X
RA-SPC-3467	Lauer House	431 St. Clair Ave. W.			X
RA-SPC-3468	Residence	452 St. Clair Ave. W.			X
RA-SPC-3469	Residence	487 St. Clair Ave. W.			X
RA-SPC-3470	Residence	493 St. Clair Ave. W.			X
RA-SPC-3471	Residence	495 St. Clair Ave. W.			X
RA-SPC-3472	Apartments	807 St. Clair Ave. W.	X		
RA-SPC-3473	Hiram H. Backus House	956 St. Clair Ave. W.	X		
RA-SPC-3474	Residence	962 St. Clair Ave. W.			X
RA-SPC-3475	Residence & Barn	992 St. Clair Ave. W.			X
RA-SPC-3476	Leslie H. Chapman House	996 St. Clair Ave. W.	X		
RA-SPC-3477	Residence	1028 St. Clair Ave. W.			X
RA-SPC-3478	Residence	1037 St. Clair Ave. W.	X		
RA-SPC-3479	Malcolm Mcmilliam House	1058 St. Clair Ave. W.	X		
RA-SPC-3480	Residence	1068 St. Clair Ave. W.	X		
RA-SPC-3481	Power Substation	ca. 1221 St. Clair Ave. W.			X
RA-SPC-3490	St. Paul Women's City Club	305 St. Peter St.	X		
RA-SPC-3508	Residence	939 Scheffer Ave. W.			X
RA-SPC-3536	William Banholzer House	680 Stewart Ave.		X	

High Bridge Combined Cycle Project
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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-3537	John Mergens House	689-691 Stewart Ave. W.			X
RA-SPC-3538	Pastika House	695 Stewart Ave. W.			X
RA-SPC-3539	Residence	780 Stewart Ave. W.			X
RA-SPC-3549	James Melady House	361 Stryker Ave. S.			X
RA-SPC-3550	Biederich House	372 Stryker Ave. S.			X
RA-SPC-3551	Residence	385 Stryker Ave. S.			X
RA-SPC-3552	Residence	387 Stryker Ave.			X
RA-SPC-3553	Henry Heinsch House	390 Stryker Ave. S.			X
RA-SPC-3554	Apartments	436-438 Stryker Ave. S.			X
RA-SPC-3555	Double Residence	448-450 Stryker Ave. S.			X
RA-SPC-3566	Residence	299 Sturgis St. W.			X
RA-SPC-3569	The Carlyle	129 Summit Ave. E.			X
RA-SPC-3570	Morris Court	about 131 Summit Ave. E.			X
RA-SPC-3571	The Ambassador	168-170 Summit Ave.			X
RA-SPC-3572	The Elm	178-180 Summit Ave.			X
RA-SPC-3573	C. D. Kerr House	184 Summit Ave.			X
RA-SPC-3574	Residence	186 Summit Ave.			X
RA-SPC-3575	Park Court	194 Summit Ave.			X
RA-SPC-3576	School Patrol Flagpole	ca. 201 Summit Ave. W.	X		
RA-SPC-3577	Charles P. Noyes/ Joseph Mckay House	235 Summit Ave. W.	X		
RA-SPC-3578	William B. Bend House	239 Summit Ave. W.	X		
RA-SPC-3579	James J. Hill House	240 Summit Ave.	X		
RA-SPC-3580	Charles Paul House	245 Summit Ave. W.	X		
RA-SPC-3581	Horace P. Rugg House	251 Summit Ave. W.	X		
RA-SPC-3582	Double Residence	255-257 Summit Ave. W.	X		
RA-SPC-3583	Louis W. And Maud Hill House	260 Summit Ave. W.	X		

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-3584	James H. Weed House	261 Summit Ave. W.	X		
RA-SPC-3585	John S. Robertson House	265 Summit Ave. W.	X		
RA-SPC-3586	Driscoll/ Weyerhaeuser House	266 Summit Ave. W.	X		
RA-SPC-3587	Charles Schuneman House	275 Summit Ave. W.	X		
RA-SPC-3589	Joshua Sanders House	271 Summit Ave. W.	X		
RA-SPC-3590	Frederick A. Fogg House	285 Summit Ave. W.	X		
RA-SPC-3591	George F. Lindsay House	294 Summit Ave. W.	X		
RA-SPC-3592	Albert H. And Louise Lindeke House	295 Summit Ave. W.	X		
RA-SPC-3593	George W. Gardner House	301 Summit Ave. W.	X		
RA-SPC-3594	Joseph L. Forepaugh House	302 Summit Ave. W.	X		
RA-SPC-3597	William Lightner/ George B. Young Double House	322-324 Summit Ave.	X		
RA-SPC-3598	Edward N. Saunders House	323 Summit Ave. W.	X		
RA-SPC-3606	William B. & Mary Dean House	353 Summit Ave. W.	X		
RA-SPC-3607	Donald S. Culver	361 Summit Ave. W.	X		
RA-SPC-3608	Bass/Griggs House	365 Summit Ave. W.	X		
RA-SPC-3609	Egil & Rachel Boeckmann House	366 Summit Ave. W.	X		
RA-SPC-3610	Cochran Park	ca. 369 Summit Ave. W.	X		
RA-SPC-3611	J. R. Mitchell House	370 Summit Ave. W.	X		
RA-SPC-3612	Auerbach House	400 Summit Ave. W.	X		
RA-SPC-3613	Nathan Hale Statue	ca. 401 Summit Ave. W.	X		
RA-SPC-3614	Edwin W. Winter House	415 Summit Ave. W.	X		
RA-SPC-3615	University Club	420 Summit Ave. W.	X		
RA-SPC-3616	Edward T. Buxton House	421 Summit Ave. W.	X		
RA-SPC-3797	Howard House	12 Summit Ct.	X		
RA-SPC-3798	Residence	18 Summit Ct.	X		

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-3799	George C. Squires House	19 Summit Ct.	X		
RA-SPC-3800	Bement House	27 Summit Ct.	X		
RA-SPC-3801	Sylvester Cary House	29 Summit Ct.	X		
RA-SPC-3802	Paul H. Gotzian House	33 Summit Ct. (also 32 Lawton St. S.)	X		
RA-SPC-3803	Residence	312 Superior St. W.			X
RA-SPC-3804	Anton Krutina House	313 Superior St. W.			X
RA-SPC-3805	Duncan C. Murray	325 Superior St. W.			X
RA-SPC-3806	Saloon/ House	398 Superior St. W.			X
RA-SPC-3807	Borovansky House	399 Superior St. W.			X
RA-SPC-3808	Residence	402 Superior St. W.			X
RA-SPC-3809	Residence	407 Superior St. W.			X
RA-SPC-3810	Residence	414 Superior St. W.			X
RA-SPC-3845	Residence	324 Toronto St. S.			X
RA-SPC-3846	Residence	696 Tuscarora Ave. W.			X
RA-SPC-3847	Residence	700 Tuscarora Ave. W.			X
RA-SPC-3848	Residence	772 Tuscarora Ave. W.			X
RA-SPC-3849	Residence	827-829 Tuscarora Ave.			X
RA-SPC-3850	Residence	833 Tuscarora Ave.			X
RA-SPC-3851	Ed Ayd House	845 Tuscarora Ave. W.			X
RA-SPC-3852	John J. Juenemann House	862 Tuscarora Ave.			X
RA-SPC-3981	Residence	449 View St. N.			X
RA-SPC-3982	Palace Playground Center	350 View St. S.			X
RA-SPC-3983	St. James School	486 View St. S.			X
RA-SPC-3984	St. James Church	496-506 View St. S.			X
RA-SPC-3985	Residence	516 View St. S.			X
RA-SPC-4000	House	490 Jefferson Ave. W			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-4001	Novotny, Joseph, House	496 Jefferson Ave. W			X
RA-SPC-4002	House	502 Jefferson Ave. W			X
RA-SPC-4003	Double House	573-575 Jefferson Ave. W			X
RA-SPC-4004	Peter P. Poppler House	649 Jefferson Ave. W			X
RA-SPC-4005	House	667 Jefferson Ave. W			X
RA-SPC-4006	Thomas Sterba House	673 Jefferson Ave. W			X
RA-SPC-4074	Eugene Towle House	18 Kenwood Pkwy.	X		
RA-SPC-4075	House	25 Kenwood Pkwy.	X		
RA-SPC-4076	Phillip Mcquillan House	26 Kenwood Pkwy.			X
RA-SPC-4077	Mcneil S. Stringer House	30 Kenwood Pkwy.	X		
RA-SPC-4078	House	38 Kenwood Pkwy.	X		
RA-SPC-4079	Emil Geist House	42 Kenwood Pkwy.	X		
RA-SPC-4229	Engine Company #3	1 Leech St. S			X
RA-SPC-4230	House	56 Leech St.		X	
RA-SPC-4231	House	58 Leech St.		X	
RA-SPC-4232	House	72 Leech St. S		X	
RA-SPC-4233	Wilder Day Nursery No. 2	73 Leech St.		X	
RA-SPC-4234	Central Church Of Christ	80 Leech St. S			X
RA-SPC-4235	Double House	83 Leech St. S (184 McBoal St. W)			X
RA-SPC-4236	Elizabeth Gardner Rowhouse	89-97 Leech St. S		X	
RA-SPC-4237	Elizabeth Shearen House	102 Leech St. S		X	
RA-SPC-4260	House	235 Lexington Pkwy. S			X
RA-SPC-4319	Edward Stringer House	696 Linwood Ave. W	X		
RA-SPC-4320	Samuel Turner House	700 Linwood Ave. W	X		
RA-SPC-4321	Glenn R. Walding House	709 Linwood Ave. W	X		
RA-SPC-4322	Edmund Houghtaling House	712 Linwood Ave. W	X		

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-4323	Francis Savage House	710 Linwood Ave. W	X		
RA-SPC-4324	Bjorklund House	725 Linwood Ave. W	X		
RA-SPC-4325	Henry Schade House	859 Linwood Ave. W			X
RA-SPC-4335	House	1030 Lombard Ave. W			X
RA-SPC-4336	Merlin E. Engle House	1037 Lombard Ave. W			X
RA-SPC-4337	Alma Mechan House	1058 Lombard Ave. W			X
RA-SPC-4338	Axel & Anna Johnson House	1089 Lombard Ave. W			X
RA-SPC-4346	House	148 McBoal St. W		X	
RA-SPC-4347	House	156 McBoal St. W		X	
RA-SPC-4348	House	165 McBoal St. W		X	
RA-SPC-4349	Terrance MCGovern House	169 McBoal St. W		X	
RA-SPC-4350	Gardner House	192 McBoal St. W		X	
RA-SPC-4351	Patrick O'Brien House	194 McBoal St. W		X	
RA-SPC-4352	T.J. O'Connor Double House	199-201 McBoal St. W		X	
RA-SPC-4353	Martin Weber House	202 McBoal St. W		X	
RA-SPC-4354	Alexander Menzies House	208 McBoal St. W		X	
RA-SPC-4355	Christopher D. O'Brien House	212 McBoal St. W		X	
RA-SPC-4405	Double House	147-149 Maria Ave. N			X
RA-SPC-4406	Albert & Wilhemina Koehler House	170 Maria Ave. N			X
RA-SPC-4407	Cavanaugh House	178 Maria Ave. N			X
RA-SPC-4512	House	627 Juno Ave. W			X
RA-SPC-4513	House	637 Juno Ave. W			X
RA-SPC-4514	House	760 Juno Ave. W			X
RA-SPC-4516	Chicago Great Western Lift Bridge	118 Kellogg Blvd. E			X
RA-SPC-4527	Ramsey County Adult Detention Center	12-14 Kellogg Blvd. W			X
RA-SPC-4528	St. Paul City Hall-Ramsey County Courthouse	15 Kellogg Blvd. W	X		

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-4529	West Publishing Company	50 Kellogg Blvd. W			X
RA-SPC-4530	Northwestern Bell Telephone Company Building	59 Kellogg Blvd. W			X
RA-SPC-4531	Northwestern Bell Building	59 Kellogg Blvd. W			X
RA-SPC-4532	Tri-State Telephone Co. Building	59 Kellogg Blvd. W			X
RA-SPC-4559	House	707 Mercer St. S			X
RA-SPC-4560	House	717 Mercer St. S			X
RA-SPC-4562	Mary Heitmiller House	320 Michigan St. W			X
RA-SPC-4563	Joseph Hermann House	336 Michigan St. W			X
RA-SPC-4564	House	343 Michigan St. W			X
RA-SPC-4565	House	353 Michigan St. W			X
RA-SPC-4566	House (Barn)	366 Michigan St. W			X
RA-SPC-4567	Thornton House	369 Michigan St. W			X
RA-SPC-4568	Czecho Slovak Protective Society Hall	381-383 Michigan St. W	X		
RA-SPC-4569	House	395 Michigan St. W			X
RA-SPC-4570	House	422 Michigan St. W			X
RA-SPC-4571	Michael Jelinik House	487 Michigan St. W			X
RA-SPC-4572	House	483 Michigan St. W			X
RA-SPC-4573	House	529 Michigan St. W			X
RA-SPC-4574	House	537 Michigan St. W			X
RA-SPC-4693	Peter & Mary Giesen House	827 Mound St. N	X		
RA-SPC-4694	Smith-Davidson-Scheffer House	908 Mound St.			X
RA-SPC-4695	George W. Bohn House	51 Mounds Blvd. E			X
RA-SPC-4696	House	52 Mounds Blvd. E			X
RA-SPC-4697	House	172 Mounds Blvd. E			X
RA-SPC-4698	Schliemann-Kalscheuer House	196 Mounds Blvd. E			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-4720	Harriet Island Pavilion	75 Water St.	X		
RA-SPC-4738	House	260 Nugent St. S			X
RA-SPC-4739	August A. Anderson House	265 Nugent St. S			X
RA-SPC-4740	Charles Mishek House	272 Nugent St. S			X
RA-SPC-4741	Edward Mishek House	276 Nugent St. S			X
RA-SPC-4759	Cave Storage	257 Ohio St. S			X
RA-SPC-4760	Commercial Building	297 Ohio St. S			X
RA-SPC-4761	House	420 Ohio St. S			X
RA-SPC-4773	St. Clair Playground Building	265 Oneida St. S			X
RA-SPC-4774	Brand House	299 Oneida St. S			X
RA-SPC-4775	House	300 Oneida St. S			X
RA-SPC-4776	Barn	300 Oneida St. S			X
RA-SPC-4777	House	309 Oneida St. S			X
RA-SPC-4778	Fishbach, Andrew, House	312 Oneida St. S			X
RA-SPC-4779	House	324 Oneida St. S			X
RA-SPC-4790	House	361 Osceola St. S			X
RA-SPC-4791	House	372 Osceola St. S			X
RA-SPC-4792	House	399 Osceola Ave. S			X
RA-SPC-4793	House	409 Osceola St. S			X
RA-SPC-4794	St. Francis De Sales School	426 Osceola St. S			X
RA-SPC-4795	St. Francis De Sales Church	426 Osceola St. S			X
RA-SPC-4796	Joseph J. Trenter House	443 Osceola St. S			X
RA-SPC-4797	House	460 Osceola St. S			X
RA-SPC-4798	House	685 Osceola Ave. W	X		
RA-SPC-4799	House	691 Osceola Ave. W	X		
RA-SPC-4800	House	697 Osceola Ave. W	X		

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-4801	Lettau/Michaud House	712 Osceola Ave. W	X		
RA-SPC-4820	House	971 Otto Ave. N			X
RA-SPC-4821	House	979 Otto Ave.			X
RA-SPC-4841	House	615 Palace Ave. W			X
RA-SPC-4842	Nicholas Lauer House	671 Palace Ave. W			X
RA-SPC-4843	Monroe High School	810 Palace Ave. W			X
RA-SPC-4844	House	862 Palace Ave. W			X
RA-SPC-4845	A. Sendhofner House	866 Palace Ave.			X
RA-SPC-4846	House	899 Palace Ave. W			X
RA-SPC-5000	John Bergstrom Apt.	671-673 Watson Ave. W.			X
RA-SPC-5002	Residence	703 Watson Ave. W.			X
RA-SPC-5003	Residence	718 Watson Ave. W.			X
RA-SPC-5004	Immanuel Baptist Church	750 Watson Ave. W.			X
RA-SPC-5006	Residence	300 and 300 1/2 Webster St. S.			X
RA-SPC-5007	Residence	309 Webster St. S.			X
RA-SPC-5008	Residence	324 Webster St. S.			X
RA-SPC-5041	Jefferson School	90 Western Ave. S.			X
RA-SPC-5042	Residence	93 Western Ave. S.			X
RA-SPC-5043	Residence	139 Western Ave. S.			X
RA-SPC-5044	Residence	159 Western Ave. S.			X
RA-SPC-5045	St. Stanislaus School	175 Western Ave. S.			X
RA-SPC-5046	Church Of St. Stanislaus	ca. 187 Western Ave. S.			X
RA-SPC-5047	Residence	ca. 216 Western Ave. S.			X
RA-SPC-5048	Lauer Flats	226 Western Ave. S.	X		
RA-SPC-5049	Rowhouses	241-249 Western Ave. S.			X
RA-SPC-5050	Bourgeault House	251 Western Ave. S.			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-5051	Residence	267 Western Ave. S.			X
RA-SPC-5052	Pinkas House	275 Western Ave. S.			X
RA-SPC-5079	George Krech House	55 Wilkin St. S.		X	
RA-SPC-5080	John Clarkin House	57 Wilkin St.		X	
RA-SPC-5081	Olmstead House	87 Wilkin St. S.		X	
RA-SPC-5082	Edwin S. Chittenden House	95 Wilkin St. S.		X	
RA-SPC-5083	Christian Heer House	99-101 Wilkin St.		X	
RA-SPC-5084	N. Myrick House	103-105 Wilkin St.		X	
RA-SPC-5126	John & Mary Minea House	382-384 Winslow Ave. S.			X
RA-SPC-5127	Pilney House	386 Winslow Ave. S.			X
RA-SPC-5128	Residence	395 Winslow Ave. S.			X
RA-SPC-5129	Gustav E. Bruckner House	404 Winslow Ave. S.			X
RA-SPC-5130	Residence	412 Winslow Ave. S.			X
RA-SPC-5131	Stowl House	429 Winslow Ave. S.			X
RA-SPC-5203	3rd St. Bridge	3rd St. E. at Mounds Blvd.			X
RA-SPC-5204	Residence	661 3rd St. E.			X
RA-SPC-5205	Double Residence	663-667 3rd St. E.			X
RA-SPC-5206	Residence	669 3rd St. E.			X
RA-SPC-5231	Rowhouse	658-666 4th St. E.			X
RA-SPC-5232	Rowhouse	668-674 4th St. E.			X
RA-SPC-5244	Studio Building	65-71 4th St. W.			X
RA-SPC-5245	James J. Hill Reference Library/ St. Paul Public Library	80-90 4th St. W.	X		
RA-SPC-5287	Cathedral Parochial School	328 6th St. W.			X
RA-SPC-5289	Commercial Building	201-203 7th St. W. (Fort Rd.)			X
RA-SPC-5290	Commercial Building	211-219 7th St. W.			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-5291	Law Office	222 7th St. W. (Fort Rd.)			X
RA-SPC-5292	Law Office	224 7th St. W. (Fort Rd.)			X
RA-SPC-5293	Smith Building	225-229 1/2 7th St. W. (Fort Rd.)			X
RA-SPC-5294	J. H. Nickel's Restaurant	249-253 7th St. W. (Fort Rd.)			X
RA-SPC-5295	Commercial Building	250 7th St. W. (Fort Rd.)			X
RA-SPC-5296	Ramsey, Justus C., House	252 7th St. W. (Fort Rd.)	X		
RA-SPC-5297	Commercial Building	254 7th St. W.			X
RA-SPC-5298	Sauerwein Building	261-265 7th St. W. (Fort Rd.)	X		
RA-SPC-5299	Louise Building	267-269 7th St. W. (Fort Rd.)	X		
RA-SPC-5300	Goodkind/ Mannheimer House	270 7th St. W. (Fort Rd.)	X		
RA-SPC-5301	Rochat Building	273-277 7th St. W. (Fort Rd.)	X		
RA-SPC-5302	Bar	329 7th St. W. (Fort Rd.)			X
RA-SPC-5303	Residence	362 7th St. W. (Fort Rd.)			X
RA-SPC-5304	Gem Theater	401 7th St. W.			X
RA-SPC-5305	Commercial Building	449 7th St. W. (Fort Rd.)			X
RA-SPC-5306	Otto W. Roland Building	455-459 7th St. W. (Fort Rd.)			X
RA-SPC-5307	Commercial Building	469 7th St. W. (Fort Rd.)			X
RA-SPC-5308	Commercial Building	477 7th St. W. (Fort Rd.)			X
RA-SPC-5309	Commercial Building	479 7th St. W. (Fort Rd.)			X
RA-SPC-5310	Apartment	ca. 553 7th St. W. (Fort Rd.)			X
RA-SPC-5311	Residence	557 7th St. W. (Fort Rd.)			X
RA-SPC-5312	Godbout And Sons Mortuary	560 7th St. W. (Fort Rd.)			X
RA-SPC-5313	Residence	561 7th St. W. (Fort Rd.)			X
RA-SPC-5314	Railroad Car/ Day By Day Diner	603 7th St. W.			X
RA-SPC-5315	Service Station	675 7th St. W. (Fort Rd.)			X
RA-SPC-5316	Christopher Stahlmann/ Jacob Schmidt House	855 7th St. W. (Fort Rd.)			X

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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-5317	Stahlmann House	877 7th St. W.			X
RA-SPC-5318	Jacob Schmidt Brewing Company	882 7th St. W. (Fort Rd.)			X
RA-SPC-5319	Weber's Family Liquor Store	925 7th St. W. (Fort Rd.)			X
RA-SPC-5320	Meat Market	943-945 7th St. W. (Fort Rd.)			X
RA-SPC-5321	Commercial Building	951-957 7th St. W. (Fort Rd.)			X
RA-SPC-5322	Commercial Building	961-965 7th St. W. (Fort Rd.)			X
RA-SPC-5323	Saloon/Apartments	974 7th St. W. (Fort Rd.)			X
RA-SPC-5324	Café/Apartments	976 7th St. W. (Fort Rd.)			X
RA-SPC-5325	Shoe Store/ Apartments	987-989 7th St. W. (Fort Rd.)			X
RA-SPC-5326	Machovec Building	999 7th St. W. (Fort Rd.)			X
RA-SPC-5327	Pilney's	1032 7th St. W.			X
RA-SPC-5328	Ayd Hall	1033 7th St. W. (Fort Rd.)			X
RA-SPC-5329	Residence	1050 7th St. W. (Fort Rd.)			X
RA-SPC-5330	Residence	1069 7th St. W. (Fort Rd.)			X
RA-SPC-5331	Residence	1072 7th St. W. (Fort Rd.)			X
RA-SPC-5332	Residence	1077 7th St. W. (Fort Rd.)			X
RA-SPC-5333	Edward Ayd Building	1093 7th St. W. (Fort Rd.)			X
RA-SPC-5334	Grocery Store And Apartments	1095 7th St. W. (Fort Rd.)			X
RA-SPC-5335	Stores/Apartments	1099-1105 7th St. W. (Fort Rd.)			X
RA-SPC-5336	Grocery Store/ Apartments	1148 7th St. W. (Fort Rd.)			X
RA-SPC-5337	Residence	1155 7th St. W. (Fort Rd.)			X
RA-SPC-5338	Horejs Bakery	1163-1165 7th St. W. (Fort Rd.)			X
RA-SPC-5339	Residence	1164 7th St. W. (Fort Rd.)			X
RA-SPC-5340	Saloon/ Apartments	1169-1171 7th St. W. (Fort Rd.)			X
RA-SPC-5341	Hotel And Saloon	1173-1175 7th St. W. (Fort Rd.)			X
RA-SPC-5342	Residence	1177 7th St. W. (Fort Rd.)			X

High Bridge Combined Cycle Project
Phase I Architectural History Evaluation and Area of Potential Effect Scoping

Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-5343	Store/ Apartments	ca. 1184 7th St. W. (Fort Rd.)			X
RA-SPC-5344	Boehm Building	1217 7th St. W. (Fort Rd.)			X
RA-SPC-5345	Conrad Keinschmidt House	1218 7th St. W. (Fort Rd.)			X
RA-SPC-5346	Double Residence	1222 7th St. W. (Fort Rd.)			X
RA-SPC-5347	Residence	1227 7th St. W. (Fort Rd.)			X
RA-SPC-5348	Residence	1261 7th St. W. (Fort Rd.)			X
RA-SPC-5349	Frank Bulena House	1271-1273 7th St. W. (Fort Rd.)			X
RA-SPC-5350	Catherine Bruggeman House	1310 7th St. W. (Fort Rd.)			X
RA-SPC-5351	Residence	1333 7th St. W. (Fort Rd.)			X
RA-SPC-5352	Residence	1352 7th St. W. (Fort Rd.)			X
RA-SPC-5353	Richard J. Hodnett House	1399 7th St. W.			X
RA-SPC-5354	Residence	1409 7th St. W. (Fort Rd.)			X
RA-SPC-5355	Residence	1542 7th St. W.			X
RA-SPC-5356	Birmingham House	1567 7th St. W. (Fort Rd.)			X
RA-SPC-5357	Residence	1578 7th St. W. (Fort Rd.)			X
RA-SPC-5358	"Dapper Dan" Hogan House	1607 7th St. W. (Fort Rd.)			X
RA-SPC-5359	Residence	1620 7th St. W. (Fort Rd.)			X
RA-SPC-5418	Mary Hall	9th St. W. & Main St. (Hospital address: 69 Exchange St. W.)			X
RA-SPC-5440	Wabasha St. Bridge (Razed)	Wabasha St. N. and Kellogg Blvd. E.			X
RA-SPC-5456	Minnesota Boat Club Boathouse	1 Wabasha St. S. (Navy Island)	X		
RA-SPC-5457	Coca Cola Bottling Company	84 Wabasha St. S.			X
RA-SPC-5472	Wright-Prendergast House	223 Walnut St. S.	X		
RA-SPC-5473	John Matheis House	307 Walnut St. S.	X		
RA-SPC-5474	Residence	311 Walnut St.	X		
RA-SPC-5475	Residence	318 Walnut St. S.			X

High Bridge Combined Cycle Project
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Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-5476	Residence	ca. 345 Walnut St. S.			X
RA-SPC-5478	Residence	347 Walnut St. S.			X
RA-SPC-5479	Residence	354 Walnut St. S.			X
RA-SPC-5480	Residence	358 Walnut St. S.			X
RA-SPC-5481	Residence	362 Walnut St. S.			X
RA-SPC-5482	Residence	366 Walnut St. S.			X
RA-SPC-5485	Minnesota Club	317 Washington St.			X
RA-SPC-5492	Commercial Building	1 Water St. W.			X
RA-SPC-5493	Chicago, St. Paul, Minneapolis & Omaha Freight Warehouse	42 Water St. W. (41-87 Fillmore W.)			X
RA-SPC-5494	Road	ca. 252 Water St. W. (between Central Industries and bluff)			X
RA-SPC-5495	Caves And Warehouses	ca. 350 Water St. W.			X
RA-SPC-5565	Jenny Lee - Prince	115 Plato Blvd.			X
RA-SPC-5589	William Dixon House	68 Leech St.		X	
RA-SPC-5590	Valentine Haag House	88 Leech St.		X	
RA-SPC-5591	Valentine Haag House	90 Leech St.		X	
RA-SPC-5592	E. Traeger House	94 Leech St.		X	
RA-SPC-5593	Isaac George House	105 Leech St.		X	
RA-SPC-5594	Mattocks House	106-110 Leech St.		X	
RA-SPC-5595	Walter Conway House	109 Leech St.		X	
RA-SPC-5596	Conway House	111 Leech St.		X	
RA-SPC-5597	J. Derosé House	112 Leech St.		X	
RA-SPC-5598	Richard Brown Apartments	141 McBoal St.		X	
RA-SPC-5599	O.J. Reynolds House	155 McBoal St.		X	
RA-SPC-5600	Clarkin Brothers House	159-161 McBoal St.		X	

High Bridge Combined Cycle Project
Phase I Architectural History Evaluation and Area of Potential Effect Scoping

Previously Surveyed Properties in APE					
Inventory No.	Property Name	Property Address	NRHP Status		
			Listed	Considered Eligible	Not Evaluated
RA-SPC-5601	Terrance McGovern Barn/House	162 McBoal St.		X	
RA-SPC-5602	Elizabeth Gardner Duplex	184-186 McBoal St.		X	
RA-SPC-5603	Widow O'Connor House	201 1/2 McBoal St.		X	
RA-SPC-5604	Theodore Johnson Apartment Building	424-430 Smith Ave. N		X	
RA-SPC-5605	House	431 Smith Ave. N		X	
RA-SPC-5606	Charles H. Miller House	433 Smith Ave. N		X	
RA-SPC-5607	Dennis McCarthy Garage	436 Smith Ave. N		X	
RA-SPC-5608	William Heusler House	444 Smith Ave. N		X	
RA-SPC-5609	Palmer House	447 Smith Ave. N		X	
RA-SPC-5610	Anton Waldman Duplex	449-451 Smith Ave. N		X	
RA-SPC-5611	Anton Waldman House	457 Smith Ave. N		X	
RA-SPC-5612	Benjamin J. Haag House	458 Smith Ave. N		X	
RA-SPC-5613	Emil F. Henskl House	463 Smith Ave. N		X	
RA-SPC-5614	House	469 Smith Ave. N		X	
RA-SPC-5615	George Krech - Frank Werner House	43 Wilkin St.		X	
RA-SPC-5616	O'Halloran House	107 Wilkin St.		X	
RA-SPC-5617	John & Mary O'Halloran House	109 Wilkin St.		X	
RA-SPC-5625	Dr. James Ferguson House	25 Benhill Rd.			X
RA-SPC-5626	Robert Schuette House	15 Benhill Rd.			X
RA-SPC-6002	Mounds Park Rotating Beacon	1060 Mounds Blvd. E		X	

APPENDIX B: SHPO ARCHITECTURE-HISTORY INVENTORY FORM

MINNESOTA HISTORY/ARCHITECTURE INVENTORY FORM

Project: High Bridge Plant St. Paul, Ramsey County, Minnesota

Identification	
Historic Name	High Bridge Station
Current Name	High Bridge Power Plant
Field #	
Address	501 Shepard Road
City/Twp	St. Paul
County	Ramsey
Legal Desc.	Twp 28N Range 23W Sec 1, 12
USGS Quad	St. Paul East/1993
UTM Zone	15 Easting 491496 Northing 4975557
Property ID (PIN)	12.28.23.11.0005

SHPO Inventory Number	RA-SPC-3322
Review and Compliance Number	
Form (New or Updated)	Updated

Description	
Resource Type	Power Plant
Architect/Engineer	Byllesby Engineering & Management Corp.
Style	Industrial
Construction Date	1924
Original Use	Power Plant
Current Use	Power Plant

Description

The NSP High Bridge Plant is located on the banks of the Mississippi River between Shepard Road and old Shepard Road along the river. The plant was positioned near the center of a parcel that was originally 50 acres and later enlarged to slightly more than 76 acres. A Chicago, St. Paul, Minneapolis & Omaha Railway spur line enters the property and branches into several sidings, some of which remain

The power plant consists of several sections that correspond to its interior functional divisions and phases of construction. The long brick façade along the river side of the plant, built as part of the first construction project, visually unifies the portions of the plant built in 1924 and the early 1940s. All of the sections of the steel-framed building built prior to the 1950s are enclosed with red brick curtain walls. The southwest wing of the plant built in the 1950s is enclosed with ribbed sheet metal and has a fenestration pattern different from that of the earlier portions of the plant. The power plant floors are concrete; steel trusses support its roof.

The walls of the 1924 portion of the plant have a rusticated two-story base section. The upper walls are divided into bays by pilasters that terminate with stone caps below the parapet. The brick walls of the 1941-1943 portion of the plant do not have pilasters or the stone detailing used on the original portion of the plant. The bays are filled with tall windows that span several floor levels of the turbine and boiler rooms of the 1924 section. Windows in the office and substation portions of the plant and in the 1940s portion of the boiler room do not span several floor levels. Original industrial steel sash with operable awning units remains in place in some of the windows. Openings in the areas used as offices, machine shop, and some of the boiler room windows have replacement aluminum-framed sash. A stone band course sets off the parapet which have decorative brick panels and edge the plant's flat roofs; the low-pitched pediment forms that were centered on each parapet section have been removed. Roof monitors with wire-glass side walls light some of the interior spaces.

The coal that fueled the boilers in the 1924 portion of the plant was brought into the facility on a pair of spurs that entered the northeast end of the coal unloading building, which was adjacent to the boiler room. This tall, one-story space has two vehicular doors in its northeast end wall, now filled with modern doors. A tall parapet edges the roof from which a gable-roofed monitor rises. A vertical conveyor shaft, which rose along the southwest end of the exterior wall and connected with a horizontal conveyor gallery that extended across the boiler room portion of the plant, has been cut off at the height of the parapet. Most of the windows in the northwest wall of this wing were blocked when a locomotive crane shed was added to the plant circa 1926. This lower one-story space has the rusticated brick walls and parapet detailing of the coal unloading building; it also has two vehicular doors in its northeast end wall.

The boiler room that housed eight boilers arranged in two banks is adjacent to the coal unloading building. The pair of chimneys

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that rose above this space and vented the boilers was removed in 1976 when the boilers went out of service. The 1924 portion of boiler room has tall windows on its two exposed sides. A hoist beam extends from the lower portion of the central window on the northeast end wall as part of the equipment handling system. Rail spurs entered vehicular doors in the northeast end wall to serve the ash dumping mechanisms.

The 1940s portion of the boiler room has a taller section adjacent to the 1924 boiler room and extends to the northwest the width of the coal unloading building. The 1940s sheet-metal chimney positioned adjacent to the boiler room has been truncated and is surrounded by the steel framework that supports the precipitators that served the units in that section of the plant. Exterior enclosed coal conveyors fed the large internal coal bunkers that are located within the boiler room.

The turbine room is located adjacent to the boiler rooms. This portion of the plant, though not expressed clearly on the exterior of the plant, is a distinctive interior space. The narrow, rectangular space was extended with no dividing walls as the plant was enlarged in the 1940s and 1950s. The turbine room, approximately 585 feet in length, houses six generators placed end-to-end. The original 100-ton traveling crane, supported on crane girders mounted on the wall, serves the entire space, as well as the machine shop at the northeast end of the space. The 1924 and 1940s portions of the turbine room have yellow brick walls detailed with green brick. A roof monitor lights the 1924 portion of the space.

A narrow wing of the plant forms the riverfront façade. This wing houses several floors of control rooms containing offices, switchboards, and an indoor substation. The wing projected from the 1924 main block of the power plant to the southwest, in anticipation of expansion of the generating capacity of the plant. The riverside façade of these wings includes two portions with a regular fenestration pattern, and a central windowless section. A brick wall with a decorative design on the old Shepard Road side has been recently added to the property.

The major coal storage area was moved to the southwest side of the plant by the 1950s. The coal crusher unit and conveyors in that area date from the 1950s; the coal loading building was added to the coal handling system during the 1970s. A manufactured building, used as a warehouse, stands in the yard northwest of the original portion of the plant. The nearly 570-foot tall concrete chimney that stands northwest of the 1950s boiler room section was erected in 1972. A steam line that delivers steam to an off-site customer extends from the plant northwest across the property.

A concrete retaining wall that flanked the No. 1 Screen House water intake area, as well as intake structure remains on the riverfront. The No. 1 Screen House has been demolished. The No. 2 Screen is positioned on the riverbank opposite the 1950s portion of the plant. The Upper Levee Substation, which consists of a concrete block building and transformer yard, is located between the 1950s portion of the plant and old Shepard Road.

Related Outbuildings

Integrity

The High Bridge Power Plant has the overall appearance and feeling of an older power generating facility that has been improved over time. While its older portion is visible, it does not dominate the property.

Alterations to the material integrity of the 1924 portion of the plant include the removal of the parapet pediments and the replacement of the window sash in about half of the original window openings with aluminum-framed multi-paned sash. The pair of chimneys that rose above the boiler room has been removed. The No. 1 Screen House has been demolished, though the below-grade components of the facility remain in place. The large sign that was attached to the twin smoke stacks of the original plant for thirty years has been removed.

The expansion of the plant was always intended and the addition to the plant to house the two units added in the 1940s does not detract significantly from the integrity of the original portion. However, the somewhat larger addition of the 1950s and related facilities have a larger impact. The additions to the turbine and boiler rooms, the No. 2 Screen House, the Upper Levee Substation, the large external precipitators, the concrete stack erected in 1972, and the coal handling equipment in the coal yard combine to significantly alter the immediate setting of the 1924 portion of the plant.

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Project: High Bridge Plant St. Paul, Ramsey County, Minnesota

The High Bridge Power Plant can no longer convey well the operation and scale of the 1924 facility. The functional improvements to the plant have diminished its historic integrity in design, materials, setting, and feeling.

EVALUATION AND ANALYSIS

Historical Context

Urban Centers, 1870-1940

Historical Narrative

The construction of the High Bridge Plant, which was to relieve the demands on the NSP Riverside Plant in Minneapolis, was announced in December 1922. NSP selected a 50-acre site on the Mississippi River, then occupied by a substation, for the plant and took its name from the High Bridge over the Mississippi River that crossed the property. The location provided a supply of river water for the condensers and good railway connections for the delivery of coal. The demands for coal and water were staggering: the first generator required one ton of coal each hour for the generation of steam and 750 tons of water were necessary for every ton of coal consumed.

The Byllesby Engineering & Management Corporation, a subsidiary of Byllesby & Company, designed the plant and oversaw its construction. H. W. Fuller was vice-president and chief engineer; F. H. Land was the manager of engineering and construction. The plant was designed to be expanded to accommodate eight generating units and to be the big base-load plant of the NSP system. The plan for expansion resulted in the extension of the river side wing beyond the main block of the plant. The next section of the plant would include an extension of the turbine and boiler rooms behind that wing.

Simplicity, economy, and convenience, rather than the use of the newest and most expensive equipment, guided planning for the plant. Its design drew upon standard plans for spaces and equipment arrangements adopted by Byllesby & Co. The engineers decided to use mechanical stokers instead of the newer pulverized coal system to feed the boilers. The riverbank location of the plant and fluctuating water levels limited the amount of excavation undertaken and required the use of concrete piles; only the area under the turbine room, where the water intake and discharge tunnels met the condenser cooling apparatus, was below grade.

The High Bridge plant started producing electricity on June 15, 1924. As was usual at the time, St. Paul Mayor A. E. Nelson officially started the turbine in a public ceremony held the following month. After the second generator, Unit 2, went on line in October, 1924, the High Bridge Plant was celebrated by its parent holding company as a "Power Giant" for the central northwest. In 1925 the plant required 900 tons of coal and 368,000 tons of water each day. The plant property provided storage space for 170,000 tons of coal, the equivalent to nearly 200 days of operation, in a coal and pole storage yard initially located north of the plant. The High Bridge and Riverside plants, NSP's base-load plants, were linked by a new "power loop" that circled the Twin Cities and was connected with the other plants of the system. The High Bridge Plant could also distribute power directly to St. Paul.

NSP announced plans in 1940 to add a 50,000-kilowatt generator to the High Bridge Plant. This increase in generative capacity was accompanied by an addition to the plant, a wing placed behind the river-facing extension of the original plant. The No. 3 steam unit, placed in service in February 1942, could use both coal and natural gas as a fuel. This unit signaled a change from stoker-fed boilers to the use of pulverized coal. An additional generator of the same size, Unit 4, was ordered in 1941 and went on line in March 1944. The War Production Board approved these wartime generator acquisitions. In 1942 and 1943 heavy transmission lines between the main generating station in St. Paul and Minneapolis were completed.

The High Bridge Plant was enlarged in the next round of construction in the post-World War II expansion program. Units 5 and 6 of the High Bridge Plant went on line in 1956 and 1959 in a new wing of the plant. By that time, the scale of each addition was significantly larger than the original ones; they were rated at 100,000 and 156,000 kilowatts. The High Bridge Plant was

MINNESOTA HISTORY/ARCHITECTURE INVENTORY FORM

Project: High Bridge Plant St. Paul, Ramsey County, Minnesota

NSP's largest power plant in 1961. With a 482,800-kilowatt capacity, it exceeded that of the decade-old Black Dog Plant by only about 22,000 kilowatts.

During the 1970s, the emissions control program of the plant was updated with the installation of outside precipitators. After the new smoke stack was erected in 1972, the smaller stacks that served the individual units were removed. The original generators, Units 1 and 2, and their associated smoke stacks were removed in 1976. Units 3 and 4 were taken out of service during the 1980s, but remain in the plant.

Significance and Recommendations

The High Bridge Power Plant has long been an important functional component of the NSP (now Xcel Energy) power supply system. The plant was designed to become one of the company's important base-load plants. Additions made to the 1924 plant during the 1940s and 1950s maintained that role and during the last half of the twentieth century, the High Bridge Power Plant functioned as one of three base-load plants in the Twin Cities area. Functional importance and historic significance are related, but are slightly different concepts. Virtually all public utility facilities have functional importance. However, only some hydroelectric and steam power generating plants have been landmark events in the electric power industry.

The High Bridge Power Plant project was part of a large-scale development program intended to expand and modernize NSP's existing power supply and distribution system. The first stage of the plant, completed in 1924, was a major project for St. Paul, as well as a notable addition to NSP's regional power system. The High Bridge Power Plant project represents an important event in the local power industry. Certainly the power that NSP provided after 1924 to residential and industrial customers in St. Paul was an underlying factor in the rapid growth of the city during the 1920s. However, the High Bridge Power Plant and the electricity it supplied did not transform life in St. Paul or significantly shape its development trajectory as a growing city with a strong commercial and industrial component. There is not a strong case for the High Bridge Power Plant as having historical significance under Criterion A. The High Bridge Power Plant was described in the engineering press by the firm that designed it as a facility intended to meet the demands for power through economical, but not innovative, engineering. The High Bridge Power Plant project did not represent an advancement in power plant design for the electric power industry during the early 1920s. It did not introduce new technology, scale of operation, or management methods. The High Bridge Power Plant does not have historical significance as defined by Criterion C.

The 1940s and 1950s additions to the High Bridge Power Plant occurred more than 50 years ago and therefore are part of its historic record. The expansions of the plant kept it functionally useful to NSP and represent up-to-date equipment use and power plant and generator engineering. However, the additions to the plant are not associated with significant local events or changes in development patterns, and were not important events in the electric power industry. The High Bridge Power Plant, as improved during the mid twentieth century, does not have historic significance.

The High Bridge Power Plant is not known to be associated with persons significant in local, state, or national history and is not identified as eligible under Criterion B. The property has not yielded, nor is it likely to yield, information important in prehistory or history, and therefore is recommended as not eligible under Criterion D.

Sources

National Register Status

Not Previously Evaluated

National Register Eligibility Recommendation

Not eligible

Prepared By

Betsy Bradley
The 106 Group Ltd.

Date

12/14/2004

MINNESOTA HISTORY/ARCHITECTURE INVENTORY FORM

Project: High Bridge Plant
St. Paul, Ramsey County, Minnesota

Property Photograph



Facing NW

Property Photograph



Facing SE

APPENDIX C: PROJECT PERSONNEL

LIST OF PERSONNEL

Project Manager	Anne Ketz, M.A., RPA
Principal Investigator	Betsy H. Bradley, Ph.D.
Report Authors	Betsy H. Bradley, Ph.D. Will Stark, M.A.
Graphics and GIS	Matthew Schillerberg